

# SERVICE MANUAL

MODEL  
.....

DEST.  
.....

VPL-CS2

WORLD

VPL-CX1

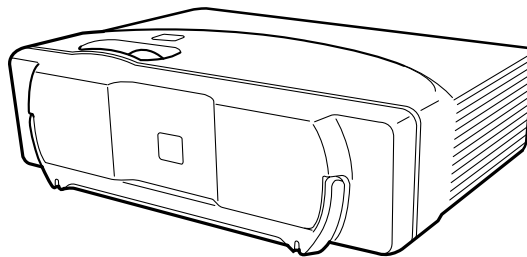
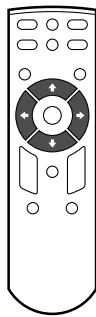
WORLD

MODEL  
.....

DEST.  
.....

RM-PJM10

WORLD



LCD DATA PROJECTOR

**SONY**<sup>®</sup>

## ⚠ 警告

このマニュアルは、サービス専用です。

お客様が、このマニュアルに記載された設置や保守、点検、修理などを行うと感電や火災、人身事故につながる可能性があります。

危険をさけるため、サービストレーニングを受けた技術者のみご使用ください。

## ⚠ WARNING

This manual is intended for qualified service personnel only.

To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

## ⚠ WARNUNG

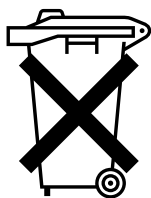
Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.

Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegebenen Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung dazu besitzen.

## ⚠ AVERTISSEMENT

Ce manuel est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres. Pour toute réparation faire appel à une personne compétente uniquement.

**For the customers in the Netherlands**  
**Voor de klanten in Nederland**



Bij dit produkt zijn batterijen geleverd.  
Wanneer deze leeg zijn, moet u ze niet  
weggooien maar inleveren als KCA.

### WARNING!!

AN INSULATED TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

### SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY A ⚠ MARK ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

### ATTENTION!!

AFIN D'ÉVITER TOUT RISQUE D'ÉLECTROCUTION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ÊTRE UTILISÉ LORS DE TOUT DÉPANNAGE. LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

### ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MAPQUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

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SONY®

4-079-834-11 (1)

# ***LCD Data Projector***

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Operating Instructions \_\_\_\_\_ **GB**

Mode d'emploi \_\_\_\_\_ **FR**

Manual de instrucciones \_\_\_\_\_ **ES**

## **Section 1** **Operating Instructions**

**VPL-CS2**  
**VPL-CX1**

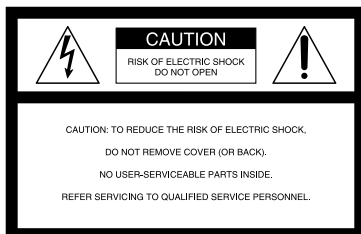
© 2000 Sony Corporation

Reprinted from the  
operating instructions

## WARNING

**To prevent fire or shock hazard, do not expose the unit to rain or moisture.**

**To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.**



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### For the customers in the USA

If you have any questions about this product, you may contact:

Sony Electronics Inc.  
Attn: Business Information Center (BIC)  
12451 Gateway Boulevard  
Ft. Myers, Florida 33913  
Telephone No.: 800-686-7669

The number below is for FCC related matters only.

### Declaration of Conformity

Trade Name: SONY  
Model No.: VPL-CS2, VPL-CX1  
Responsible Party: Sony Electronics Inc.  
Address: 1 Sony Drive, Park Ridge,  
NJ.07656 USA  
Telephone No.: 201-930-6972

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

### For the customers in Canada

This Class B digital apparatus complies with Canadian ICES-003.

### For the customers in the United Kingdom

### WARNING

### THIS APPARATUS MUST BE EARTHED

### IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow: Earth

Blue: Neutral

Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows: The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol I or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

### Voor de klanten in Nederland



Bij dit product zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

The socket-outlet should be installed near the equipment and be easily accessible.

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## ► Overview

## Precautions


### On safety

- Check that the operating voltage of your unit is identical with the voltage of your local power supply.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The wall outlet should be near the unit and easily accessible.
- The unit is not disconnected to the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Do not look into the lens while the lamp is on.
- Do not place your hand or objects near the ventilation holes. The air coming out is hot.
- Be careful not to catch your fingers by the adjuster when you lift up the projector. Do not push hard on the top of the projector with the adjuster out.

### On illumination

- To obtain the best picture, the front of the screen should not be exposed to direct lighting or sunlight.
- Ceiling-mounted spot lighting is recommended. Use a cover over fluorescent lamps to avoid lowering the contrast ratio.
- Cover any windows that face the screen with opaque draperies.
- It is desirable to install the projector in a room where floor and walls are not of light-reflecting material. If the floor and walls are of reflecting material, it is recommended that the carpet and wall paper be changed to a dark color.

### On preventing internal heat build-up

After you turn off the power with the I /  key, do not disconnect the unit from the wall outlet while the cooling fan is still running.

### Caution

The projector is equipped with ventilation holes (intake) and ventilation holes (exhaust). Do not block or place anything near these holes, or internal heat build-up may occur, causing picture degradation or damage to the projector.

### On cleaning

- To keep the cabinet looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents, such as thinner, benzene, or abrasive cleansers, since these will damage the cabinet.
- Avoid touching the lens. To remove dust on the lens, use a soft dry cloth. Do not use a damp cloth, detergent solution, or thinner.
- Clean the filter at regular intervals.

### On repacking

- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your unit. For maximum protection, repack your unit as it was originally packed at the factory.

### On LCD projector

- The LCD projector is manufactured using high-precision technology. You may, however, see tiny black points and/or bright points (red, blue, or green) that continuously appear on the LCD projector. This is a normal result of the manufacturing process and does not indicate a malfunction.

## Features

### High portability

- **Light weight/small size**  
This projector has been miniaturized to approx. 2.9 kg (6 lb 6 oz) in weight and B5-file size through the adoption of a retractable mechanism. A carrying handle is equipped with the projector, so you can carry it easily with your computer.

### Reduced noise

Because the projector uses Sony's unique cooling mechanism, noise has been reduced.

### High brightness, high picture quality

- **High brightness**  
Adopting the high-efficiency optical system and the 120 W UHP lamp allows high brightness (VPL-CS2: light output 600 ANSI lumen, VPL-CX1: light output 550 ANSI lumen) and excellent uniformity on the picture.
- **High resolution**  
**VPL-CS2:**  
Three 0.7-inch, about 480,000 pixel, SVGA panels provide a resolution of 800 × 600 dots for RGB input and 600 horizontal TV lines for video input.  
**VPL-CX1:**  
Three 0.7-inch, about 790,000 pixel, XGA panels provide a resolution of 1024 × 768 dots for RGB input and 750 horizontal TV lines for video input.

### Simple setup

- **Simple setup with external equipment**  
This projector is preset for 37 kinds of input signals. You can project images from an external signal source just by connecting the equipment with the supplied cable and pushing the APA key.
- **Compatible with USB (Universal Serial Bus) hub function**  
You can connect an USB equipment (e.g., USB mouse) to the projector, and also control the projector by using the application software (CD-ROM) supplied

with the projector from a computer operated with Windows 98, Windows 98 SE or Windows 2000. Using this application software, you can open a file you want to use for your presentation with the supplied Remote Commander.

### Easy presentation

- **Multi function Remote Commander with mouse control functions**  
You can operate a computer connected to this projector with the Remote Commander since the unit has a build-in mouse receiver.
- **Digital ZOOM and FUNCTION keys on the Remote Commander**  
The Digital ZOOM allows you to enhance your presentation by zooming in on the image.  
You can allocate a presentation file to the FUNCTION keys by using the application software (CD-ROM) supplied with the projector. Just pressing the FUNCTION key opens the file immediately.

### Accepts various input signals

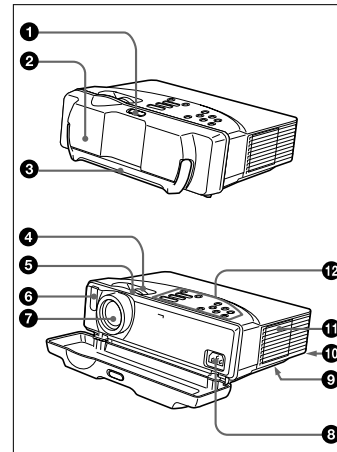
- **Scan converter loaded**  
This projector has a build-in scan converter that converts the input signal within 800 × 600 dots (VPL-CS2) or 1024 × 768 dots (VPL-CX1).
- **Compatible input signals**  
This projector accepts video signals of composite, S video, and component as well as VGA, SVGA, XGA, and SXGA signals, which all can be displayed.
- **Compatible with six color systems**  
NTSC, PAL, SECAM, NTSC<sup>4.43</sup><sup>1)</sup>, PAL-M, or PAL-N color system can be selected automatically or manually.

1)NTSC<sup>4.43</sup> is the color system used when playing back a video recorded on NTSC on a NTSC<sup>4.43</sup> system VCR.

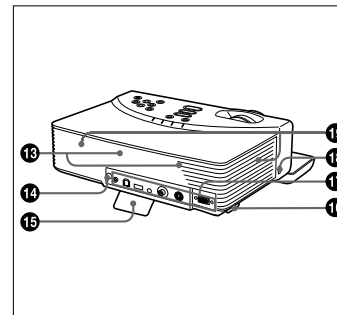
- Windows is a registered trademark of Microsoft Corporation in the United States and/or other countries.
- VGA, SVGA, XGA, and SXGA are registered trademarks of the International Business Machines Corporation, U.S.A.
- Macintosh is a registered trademark of Apple Computer, Inc.
- IBM PC/AT is a registered trademark of International Business Machines Corporation, U.S.A.
- VESA is a registered trademark of Video Electronics Standard Association.
- Display Data Channel is a trademark of Video Electronics Standard Association.
- PC-98 is a trademark of NEC Corporation.

## Location and Function of Controls

### Front/Left Side/Bottom



### Rear/Right Side



- 1 Lock button**
  - 2 Front cover**  
Slide the lock button to open the front cover.
  - 3 Carrying handle**  
Pull up the handle from the projector for carrying.
  - 4 Zoom ring**  
Adjusts the picture size.
  - 5 Focus ring**  
Adjusts the picture focus.
  - 6 Front remote control detector (SIRCS receiver)**
  - 7 Lens**
  - 8 AC IN socket**  
Connects the supplied AC power cord.
  - 9 Ventilation holes (intake)/air filter cover (bottom)**
- Notes**
- Do not place anything near the ventilation holes as it may cause internal heat build-up.
  - Do not place your hand or objects near the ventilation holes as it may cause the air coming out heat build-up.
  - To maintain optimal performance, **clean the air filter every 300 hours.**
- 10 Lamp cover (bottom)**
  - 11 Ventilation holes (exhaust)**
  - 12 Control panel**  
*For details, see "Control Panel" on page 11.*
  - 13 Speakers**
  - 14 Rear remote control detector (SIRCS receiver)**
  - 15 Adjuster**

Overview

## 16 RELEASE (adjuster adjustment) button

For details, see “How to use the adjuster” on page 10.

## 17 Connector panel

For details, see “Connector Panel” on page 12.

## 18 Security lock

Connects to an optional security cable (Kensington’s).

The security lock corresponds to Kensington’s MicroSaver Security System.

If you have any comment, contact:  
Kensington  
2853 Campus Drive  
San Mateo, CA 94403  
U.S.A.  
Tel: 800-535-4242: extension 3348

Home page address:  
<http://www.kensington.com/>

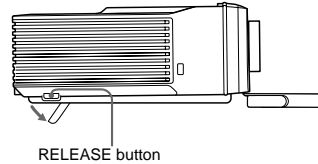
## 19 Ventilation holes (intake)

### How to use the adjuster

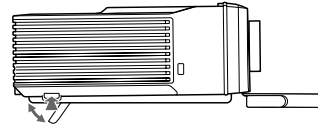
#### To adjust the height

Adjust the height of the projector as follows:

- 1 Lift the projector and press the RELEASE button.  
The adjuster will extend from the projector.



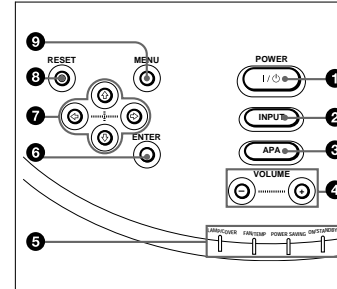
- 2 While pressing the button, lower the projector. Then, release the button.  
The adjuster can be set at 6 positions.



#### Notes

- Be careful not to let the projector down on your fingers.
- Do not push hard on the top of the projector with the adjuster out.

### Control Panel



#### 1 I / ⏻ (on/standby) key

Turns on and off the projector when the projector is in standby mode. The ON/STANDBY indicator lights in green when the power is turned on.  
When turning off the power, press the I / ⏻ key twice following the message on the screen, or press and hold the key for about one second.

For details on steps for turning off the power, see “To turn off the power” on page 24.

#### 2 INPUT key

Selects the input signal. Each time you press the key, the input signal switches as follows:



#### 3 APA (Auto Pixel Alignment) key

Adjusts a picture clearest automatically while a signal is input from a computer.

#### 4 VOLUME +/- keys

Adjust the volume of the built-in speakers.

- + : Increases the volume.
- : Decreases the volume.

## 5 Indicators

- **LAMP/COVER:** Lights up or flashes under the following conditions:
  - Lights up when the lamp has reached the end of its life or becomes a high temperature.
  - Flashes when the lamp cover or air filter cover is not secured firmly.
- **FAN/TEMP (Temperature):** Lights up or flashes under the following conditions:
  - Lights up when temperature inside the projector becomes unusually high.
  - Flashes when the fan is broken.
- **POWER SAVING:** Lights up when the projector is in power saving mode. When POWER SAVING in the SET SETTING menu is set to ON, the projector goes into power saving mode if no signal is input for 10 minutes. Although the lamp goes out, the cooling fan keeps running. In power saving mode, any key does not function for the first 30 seconds. The power saving mode is canceled when a signal is input or any key is pressed.
- **ON/STANDBY:** Lights up or flashes under the following conditions:
  - Lights in red when a AC power cord is plugged into a wall outlet. Once in standby mode, you can turn on the projector with the I / ⏻ key.
  - Lights in green when the power is turned on.
  - Flashes in green while the cooling fan runs after the power is turned off with the I / ⏻ key. The fan runs for about 90 seconds after the power is turned off.

For details on the LAMP/COVER and the FAN/TEMP indicators, see on page 35.



**6 ENTER key**

Enters the settings of items in the menu system.

**7 Arrow keys (↑/↓/←/→)**

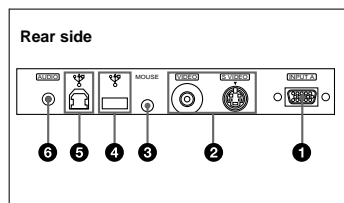
Select the menu or to make various adjustments.

**8 RESET key**

Resets the value of an item back to its factory preset value. This key functions when the menu or a setting item is displayed on the screen.

**9 MENU key**

Displays the on-screen menu. Press again to clear the menu.

**Connector Panel****1 INPUT A connector (HD D-sub 15-pin, female)**

Connect to external equipment such as a computer.

Connects to the monitor output on a computer using the supplied cable. When inputting a component or 15k RGB signal, use an optional cable.

**2 Video input connector**

Connect to external video equipment such as a VCR.

- **S VIDEO (mini DIN 4-pin):** Connects to the S video output (Y/C video output) of video equipment.
- **VIDEO (phono type):** Connects to the composite video output of video equipment.

**3 MOUSE connector (6-pin)**

Connects to the PS/2 mouse port on a computer via the supplied mouse cable, to control the mouse function of the connected computer.

**4 USB connector (USB A-plug for downstream, 4-pin)**

Connect to USB equipment such as a mouse, camera, etc.

**5 USB connector (USB B-plug for upstream, 4-pin)**

Connect to the USB connector on a computer. When you connect the projector to the computer, the projector recognizes the mouse of the computer connected to the INPUT A connector and you can control the mouse function with the supplied Remote Commander. The supplied application software can be installed in the computer attached to this connector.

**6 AUDIO (stereo minijack) connector**

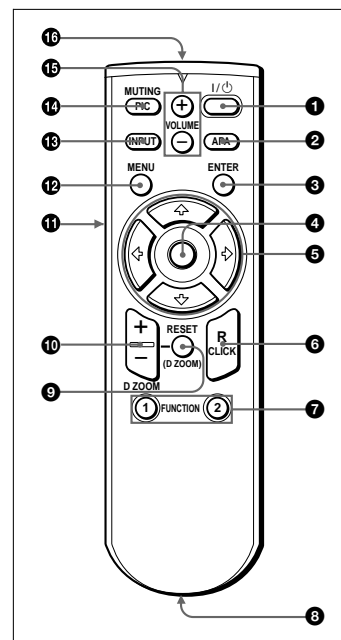
When listening to sound output from the computer, connect to the audio output of the computer.

When listening to sound output from the VCR, connect to the audio output of the VCR.

**Remote Commander**

The keys that have the same names as those on the control panel function identically. You can control a connected computer using the Remote Commander.

For details, see “To control the computer using the supplied Remote Commander” on page 23.

**1 I/O key****2 APA (Auto Pixel Alignment) key****3 ENTER key****4 Joystick**

Functions as the mouse of the computer connected to the unit.

**5 Arrow keys (↑/↓/←/→)****6 R CLICK key**

Functions as the right button on a mouse.

**7 FUNCTION 1, 2 keys**

These keys function when the supplied application software is used. When you connect the projector with a computer, you can open a file on the screen by just pressing the FUNCTION key. This will enhance your presentation. To use this function, allocate a file to the FUNCTION key by using the application software.

For details, see the *README file* and the *HELP file* supplied with the application software.

**8 CONTROL S OUT jack (stereo minijack)**

This does not function with this projector.

**9 RESET (D ZOOM) key**

Resets the value of an item back to its factory preset value or returns the enlarged image back to its original size.

**10 D ZOOM +/- key**

Enlarges the image at a desired location on the screen.

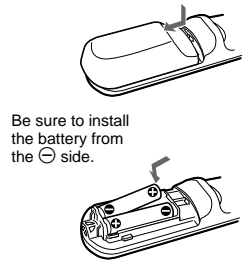
+: Pressing the + key once highlights one of the images divided into 16. Use an arrow key (↑/↓/←/→) to move the highlight portion to the point in the image to be enlarged. Press the + key repeatedly until the image is enlarged to your requirements.

–: Pressing the – key reduces an image that has been enlarged with the D ZOOM + key.

- 11 **L CLICK key**  
Functions as the left button on a mouse.
- 12 **MENU key**
- 13 **INPUT key**
- 14 **MUTING PIC key**  
Cut off the picture. Press again to restore the picture.
- 15 **VOLUME +/- keys**
- 16 **Infrared transmitter**

To install batteries

- 1 Push and slide to open the lid, then install the two size AA (R6) batteries (supplied) with the correct polarity.



- 2 Replace the lid.

Notes on batteries

- Make sure that the battery orientation is correct when inserting batteries.
- Do not mix an old battery with a new one or different types of batteries.
- If you do not use the Remote Commander for a long time, remove the batteries to avoid damage from battery leakage. If batteries have leaked, remove them, wipe and dry the battery compartment, and replace the batteries with new ones.

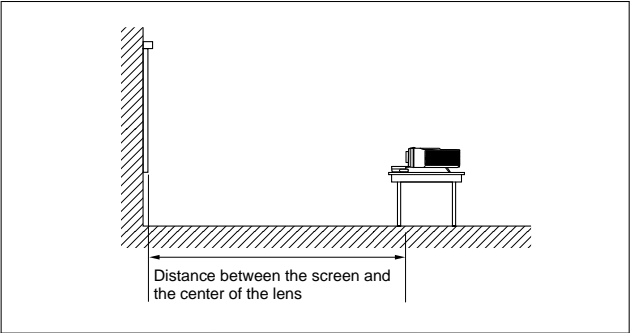
Notes on Remote Commander operation

- Make sure that nothing obstructs the infrared beam between the Remote Commander and the remote control detector on the projector. Direct the Remote Commander toward the front or rear remote control detector.
- The operation range is limited. The shorter the distance between the Remote Commander and the projector is, the wider the angle within which the commander can control the projector becomes.

► Setting Up and Projecting

Installing the Projector

This section describes how to install the projector. The distance between the lens and the screen varies depending on the size of the screen. Use the following table as a guide.



Unit: m (feet)

| Screen size (inches) | 40           | 60            | 80            | 100           | 120           | 150           |
|----------------------|--------------|---------------|---------------|---------------|---------------|---------------|
| Minimum Distance     | 1.6<br>(5.2) | 2.4<br>(7.8)  | 3.2<br>(10.5) | 4.0<br>(13.2) | 4.9<br>(15.9) | 6.1<br>(20.0) |
| Maximum Distance     | 2.0<br>(6.6) | 3.1<br>(10.0) | 4.1<br>(13.5) | 5.2<br>(16.9) | 6.2<br>(20.3) | 7.8<br>(25.5) |

Note

You can not install the projector upside down, such as on a ceiling.

Setting Up and Projecting

## Connecting the Projector

### When making connections, be sure to do the following:

- Turn off all equipment before making any connections.
- Use the proper cables for each connection.
- Insert the cable plugs properly; plugs that are not fully inserted often generate noise. When pulling out a cable, be sure to pull it out from the plug, not the cable itself.

### Connecting with a Computer

This section describes how to connect the projector to a computer. For more information, refer to the computer's instruction manual.

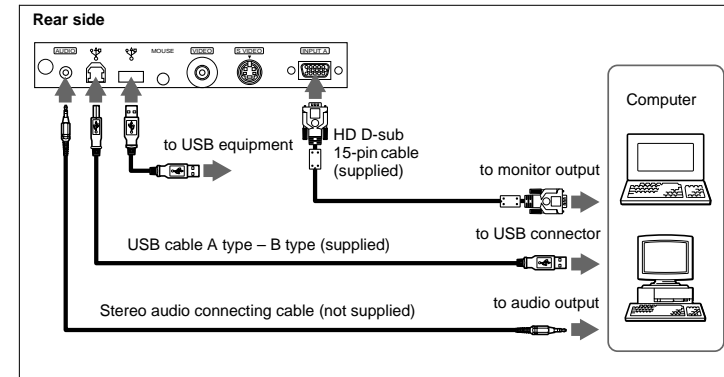
#### Notes

- The projector accepts VGA, SVGA, XGA, and SXGA signals. However, we recommend that you set the output mode of your computer to SVGA (VPL-CS2) or XGA (VPL-CX1) mode for the external monitor.
- If you set your computer, such as a notebook type, to output the signal to both your computer's display and the external monitor, the picture of the external monitor may not appear properly. Set your computer to output the signal to only the external monitor.  
*For details, refer to the computer's operating instructions supplied with your computer.*
- Supplied mouse cable may not work properly according to your computer.
- This projector is compatible with a DDC2B (Digital Data Channel 2B). If your computer is compatible with a DDC, turn the projector on according to the following procedures.

- 1 Connect the projector to the computer by using the supplied HD D-sub 15 pin cable.
- 2 Turn the projector on.
- 3 Start the computer.

### To connect an IBM PC/AT compatible computer

#### When you use a USB mouse and USB equipment



Setting Up and Projecting

### On the USB function

When connecting the projector to a computer by using the USB cable for the first time, the computer recognizes the following devices automatically.

- 1 USB hub (general use)
- 2 USB human interface device (wireless mouse function)
- 3 USB human interface device (projector control function)

The computer also recognizes the device connected to the downstream connector on the projector.

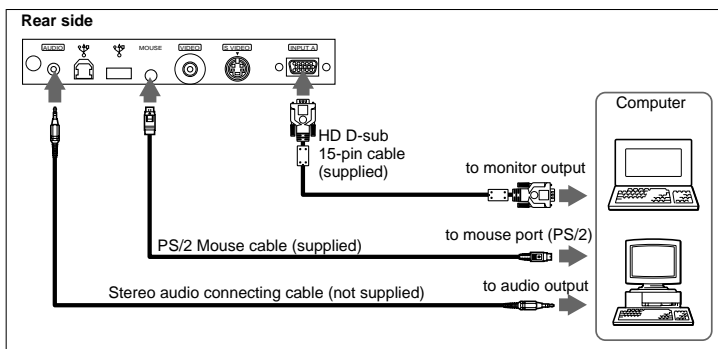
### Recommended operating environment

When you use the USB function, connect your computer as illustrated above. This application software and the USB function can be used on a computer loaded with Windows 98, Windows 98 SE or Windows 2000 preinstall models.

#### Notes

- As the projector recognizes the USB mouse when the computer is connected to the USB connector, do not connect anything to the PS/2 mouse port.
- Your computer may not start correctly when connected to the projector via the USB cable. In this case, disconnect the USB cable, restart the computer, then connect the computer to the projector using the USB cable.
- This projector is not guaranteed for suspend, standby mode. When you use the projector in suspend, standby mode, disconnect the projector from the USB port on the computer.
- Operations are not guaranteed for all the recommended computer environments.

### When you use a PS/2 mouse port



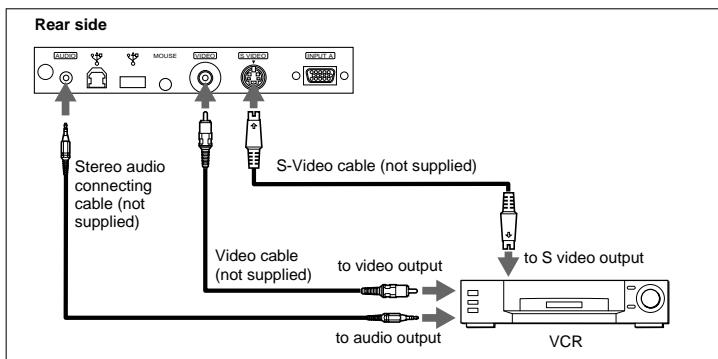
### To connect a Macintosh computer

Use an ADP-20 signal adapter (not supplied). In this case, however, you can not control the mouse of the computer by the Remote Commander.

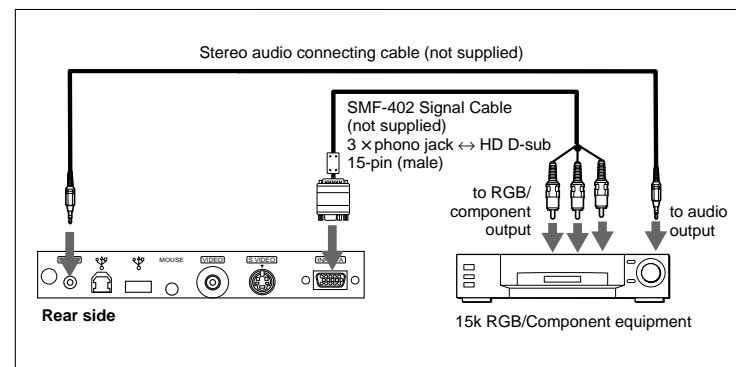
### Connecting with a VCR or 15k RGB/Component Equipment

This section describes how to connect the projector to a VCR and 15k RGB/component equipment. For more information, refer to the instruction manuals of the equipment you are connecting.

### To connect a VCR



### To connect a 15k RGB/Component equipment

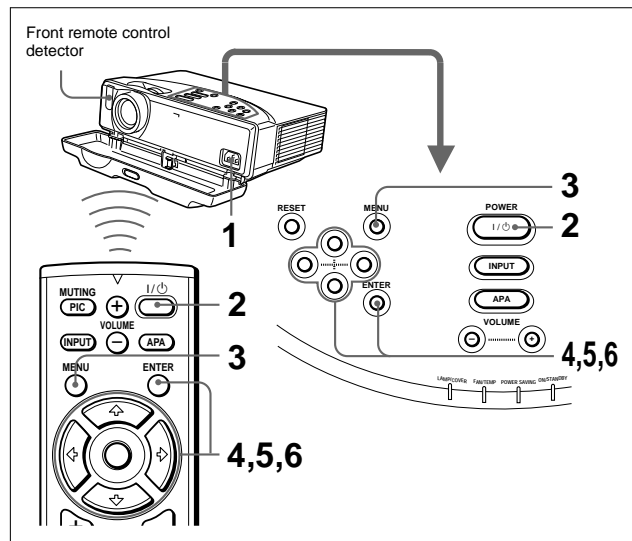


#### Notes

- Set the aspect ratio using ASPECT in the INPUT SETTING menu according to the input signal.
- When you connect the unit to 15k RGB/component video equipment, select RGB or component with the INPUT-A setting in the SET SETTING menu.
- Use the composite sync signal when you input the external sync signal from 15k RGB/component equipment.

## Selecting the Menu Language

You can select one of seven languages for displaying the menu and other on-screen displays. The factory setting is English.



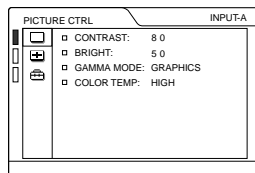
**1** Open the front cover, then plug the AC power cord into a wall outlet.

**2** Press the I / ⏻ key to turn on the projector.

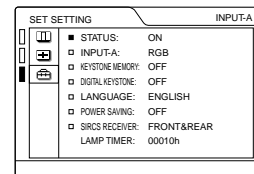
**3** Press the MENU key.

The menu appears.

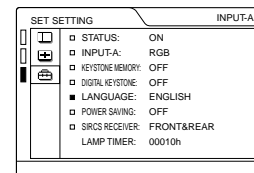
The menu presently selected is shown as a yellow button.



**4** Press the ↑ or ↓ key to select the SET SETTING menu, then press the → or ENTER key.  
The selected menu appears.



**5** Press the ↑ or ↓ key to select “LANGUAGE,” then press the → or ENTER key.



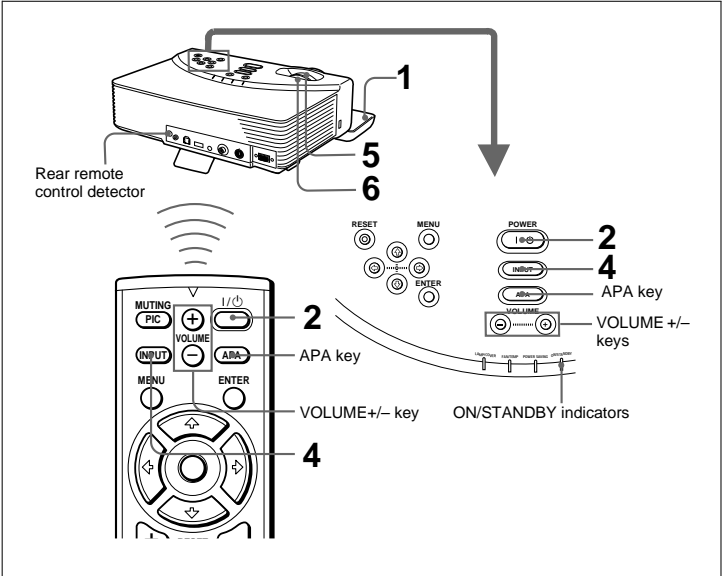
**6** Press the ↑ or ↓ key to select a language, then press the ← or ENTER key.  
The menu changes to the selected language.

### To clear the menu

Press the MENU key.

The menu disappears automatically if a key is not pressed for one minute.

# Projecting



- 1** Open the front cover, plug the AC power cord into a wall outlet, then connect all equipment.  
The ON/STANDBY indicator lights in red and the projector goes into standby mode.
- 2** Press the I / ⏻ key.  
The ON/STANDBY indicator lights in green.
- 3** Turn on the equipment connected to the projector.
- 4** Press the INPUT key to select the input source.

| To input from  | Press INPUT to display |
|--|------------------------|
| Computer connected to the INPUT A connector              | INPUT A                |
| Video equipment connected to the VIDEO input connector   | VIDEO                  |
| Video equipment connected to the S VIDEO input connector | S VIDEO                |

- 5** Turn the zoom ring to adjust the size of the picture.
- 6** Turn the focus ring to adjust the focus.

**Caution**

Looking into the lens when projecting may cause injury to your eyes.

**To adjust the volume**

Press VOLUME +/- keys. The volume can be adjusted for each of INPUT A, VIDEO and S VIDEO input.

**To cut off the picture**

Press the MUTING PIC key on the Remote Commander.  
To restore the picture, press the MUTING PIC key again.

**To control the computer using the supplied Remote Commander**

When you connect an IBM PC/AT compatible to the projector, you can control the mouse of the computer using the Remote Commander.  
The R/L CLICK keys and joystick function as follows.

| Key and joystick | Function                                    |
|------------------|---|
| R CLICK (front)  | Right button                                |
| L CLICK (rear)   | Left button                                 |
| Joystick         | Corresponds with the movements of the mouse |

**Note**

Make sure that nothing obstructs the infrared beam between the Remote Commander and the remoter control detector on the projector.

**To get the clearest picture**

You can adjust picture quality when projecting a signal from the computer.

- 1** Project a still picture from the computer.
- 2** Press the APA key.  
“Complete!” appears on the screen when the picture is adjusted properly.

**Notes**

- Press the APA key when the full image is displayed on the screen. If there are black edges around the image, the APA function will not function properly and the image may extend beyond the screen.
- When you switch the input signal or re-connect a computer, press the APA key again to adjust the picture again.
- You can cancel the adjustment by pressing the APA key again while “ADJUSTING” appears on the screen.
- The picture may not be adjusted properly depending on the kinds of input signals.
- Adjust the items in the INPUT SETTING menu when you adjust the picture manually.

## To turn off the power

- 1 Press the I / ⏻ key.  
“POWER OFF? Please press I / ⏻ key again.” appears to confirm that you want to turn off the power.

### Note

A message disappears if you press any key except the I / ⏻ key, or if you do not press any key for five seconds.

- 2 Press the I / ⏻ key again.  
The ON/STANDBY indicator flashes in green and the fan continues to run for about 90 seconds to reduce the internal heat. Also, the ON/STANDBY indicator flashes quickly for the first 30 seconds. During this time, you will not be able to light up the ON/STANDBY indicator with the I / ⏻ key.

- 3 Unplug the AC power cord from the wall outlet after the fan stops running and the ON/STANDBY indicator lights in red.

## When you cannot confirm the on-screen message

When you cannot confirm the on-screen message in a certain condition, you can turn off the power by holding the I / ⏻ key for about one second.

### Note

Do not unplug the AC power cord while the fan is still running; otherwise, the fan will stop even though the internal heat is still high, which could result in a breakdown of the projector.

## To stow the adjuster on the bottom

If you are not going to use the projector, while holding the RELEASE button pressed, fold up the adjuster on the bottom of the projector manually.

## On air filter

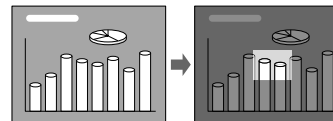
To maintain optimal performance, **clean the air filter every 300 hours**.

## Effective Tools for Your Presentation

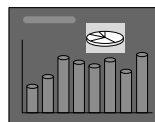
### To enlarge the image (Digital Zoom function)

You can select a point in the image to enlarge.

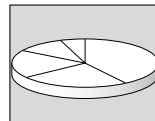
- 1 Project the original size picture and press the D ZOOM + key on the Remote Commander.  
One of the images divided into 16 is highlighted at the center of the image.



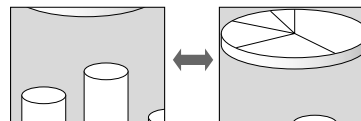
- 2 Move the highlight portion to the point you want to enlarge by pressing the arrow keys (↑/↓/←/→).



- 3 Press the D ZOOM + key again.  
The highlight image displayed in step 2 is enlarged.  
By pressing the + key repeatedly, the image size increases (ratio of enlargement: max. 4 times.)



Use the arrow keys (↑/↓/←/→) to scroll the enlarged image.



### To return the image back to its original size

Press the D ZOOM – key on the Remote Commander. Just pressing the RESET (ZOOM) key returns the image back to its original size immediately.

## ► Adjustments and Settings Using the Menu

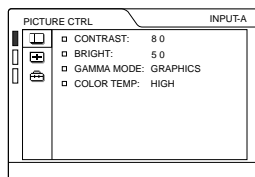
### Using the MENU

The projector is equipped with an on-screen menu for making various adjustments and settings. You can change the menu language displayed in the on-screen menu.

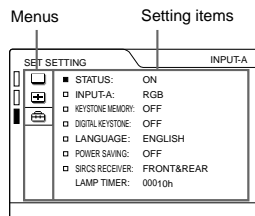
To change the menu language, see “Selecting the Menu Language” on page 20.

#### 1 Press the MENU key.

The menu appears.  
The menu presently selected is shown as a yellow button.



#### 2 Use the ↑ or ↓ key to select a menu, then press the → or ENTER key. The selected menu appears.



#### 3 Select an item.

Use the ↑ or ↓ key to select the item, then press the → or ENTER key.

#### 4 Make the setting or adjustment on an item.

- When changing the adjustment level:  
To increase the number, press the ↑ or → key.  
To decrease the number, press the ↓ or ← key.  
Press the ENTER key to restore the original screen.
- When changing the setting:  
Press the ↑ or ↓ key to change the setting.  
Press the ENTER or ← key to restore the original screen.

#### To clear the menu

Press the MENU key.  
The menu disappears automatically if a key is not pressed for one minute.

#### To reset items that have been adjusted

Press the RESET key.  
“Complete!” appears on the screen and the settings appearing on the screen are reset to their factory preset values.

Items that can be reset are:

- “CONTRAST,” “BRIGHT,” “COLOR,” “HUE,” and “SHARP” in the PICTURE CTRL menu
- “DOT PHASE,” “SIZE,” and “SHIFT” in the INPUT SETTING menu
- “DIGITAL KEYSTONE” in the SET SETTING menu

#### About the memory of the settings

The settings are automatically stored in the projector memory.

#### If no signal is input

If there is no input signal, “NO INPUT– Cannot adjust this item.” appears on the screen.

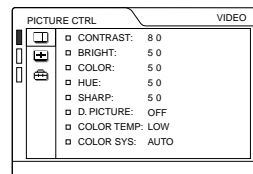
### The PICTURE CTRL Menu

The PICTURE CTRL (control) menu is used for adjusting the picture.

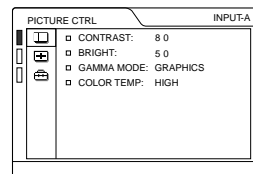
Items that cannot be adjusted depending on the input signal are not displayed in the menu.

For details on the unadjustable items, see page 40.

#### When the video signal is input



#### When the RGB signal is input



#### Menu Items

##### CONTRAST

Adjusts the picture contrast. The higher the setting, the greater the contrast. The lower the setting, the lower the contrast.

##### BRIGHT

Adjusts the picture brightness. The higher the setting, the brighter the picture. The lower the setting, the darker the picture.

##### COLOR

Adjusts color intensity. The higher the setting, the greater the intensity. The lower the setting, the lower the intensity.

##### HUE

Adjusts color tones. The higher the setting, the picture becomes greenish. The lower the setting, the picture becomes purplish.

##### SHARP

Adjusts the picture sharpness. The higher the setting, the sharper the picture. The lower the setting, the softer the picture.

##### D. (Dynamic) PICTURE

Emphasizes the black color.

**ON:** Emphasizes the black color to produce a bolder “dynamic” picture.

**OFF:** Reproduces the dark portions of the picture accurately, in accordance with the source signal.

##### GAMMA MODE

Selects a gamma correction curve.

**GRAPHICS:** Improves the reproduction of halftones. Photos can be reproduced in natural tones.

**TEXT:** Contrasts black and white. Suitable for images that contain lots of text.

##### COLOR TEMP

Adjusts the color temperature.

**HIGH:** Makes the white color bluish.

**LOW:** Makes the white color reddish.

##### COLOR SYS (System)

Selects the color system of the input signal.

- AUTO:** NTSC<sub>3.58</sub>, PAL, SECAM and NTSC<sub>4.43</sub> (switched automatically)
- PAL-M/N:** PAL-M/PAL-N and NTSC<sub>3.58</sub> (switched automatically)

Normally, set to AUTO. If the picture is distorted or colorless, select the color system according to the input signal.

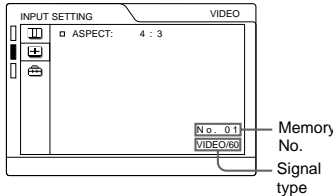


# The INPUT SETTING Menu

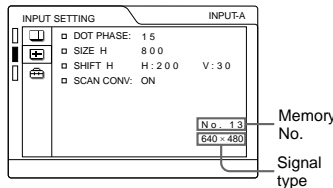
The INPUT SETTING menu is used to adjust the input signal. Items that cannot be adjusted depending on the input signal are not displayed in the menu.

For details on the unadjustable items, see page 40.

## When the video signal is input



## When the RGB signal is input



## MENU Items

### DOT PHASE

Adjusts the dot phase of the LCD panel and the signal input from the INPUT A connector. Adjust the picture further for finer picture after the picture is adjusted by pressing the APA key. Adjust the picture to where it looks clearest.

### SIZE

Adjusts the horizontal size of picture input from the INPUT A connector. The higher

the setting, the larger the horizontal size of the picture. The lower the setting, the smaller the horizontal size of the picture. Adjust the setting according to the dots of the input signal.

For details on the suitable value for the preset signals, see page 41.

### SHIFT

Adjusts the position of the picture input from the INPUT A connector. H adjusts the horizontal position of the picture. V adjusts the vertical position of the picture. As the setting for H increases, the picture moves to the right, and as the setting decreases, the picture moves to the left. As the setting for V increases, the picture moves up, and as the setting decreases, the picture moves down. Use the ← or the → key to adjust the horizontal position and the ↑ and ↓ key for the vertical position.

### SCAN CONV (Scan converter)

Converts the signal to display the picture according to the screen size.

- ON:** Displays the picture according to the screen size. The picture will lose some clarity.
- OFF:** Displays the picture while matching one pixel of input picture element to that of the LCD. The picture will be clear but the picture size will be smaller.

### Note

This item will not be displayed in the following case.  
VPL-CS2: When SVGA, XGA or SXGA signal is input  
VPL-CX1: When XGA or SXGA signal is input

### ASPECT

Sets the aspect ratio of the picture. When inputting 16:9 (squeezed) signal from equipment such as a DVD player, set to 16:9.

- 4:3:** When the picture with ratio 4:3 is input.
- 16:9:** When the picture with ratio 16:9 (squeezed) is input.

## About the Preset Memory No.

This projector has 37 types of preset data for input signals for INPUT-A (the preset memory). When a preset signal is input, the projector automatically detects the signal type and recalls the data for the signal from the preset memory to adjust it to an optimum picture. The memory number and signal type of that signal are displayed in the INPUT SETTING menu. You can also adjust the preset data through the INPUT SETTING menu.

This projector has 20 types of user memories for INPUT-A into which you can save the setting of the adjusted data for an unpreset input signal.

When an unpreset signal is input for the first time, a memory number is displayed as 00. When you adjust the data of the signal in the INPUT SETTING menu, it will be registered to the projector. If more than 20 user memories are registered, the newest memory always overwrites the oldest one.

See the chat on page 41 to find if the signal is registered to the preset memory.

Since the data is recalled from the preset memory about the following signals, you can use these preset data by adjusting SIZE. Make fine adjustment by adjusting SHIFT.

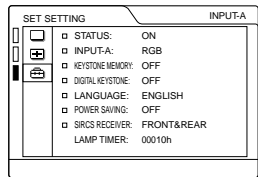
| Signal                 | Memory No. | SIZE |
|------------------------|------------|------|
| Super Mac-2            | 23         | 1312 |
| SGI-1                  | 23         | 1320 |
| Macintosh 19"          | 25         | 1328 |
| Macintosh 21"          | 28         | 1456 |
| Sony News              | 36         | 1708 |
| PC-9821<br>1280 × 1024 | 36         | 1600 |
| WS Sunmicro            | 37         | 1664 |

### Note

When the aspect ratio of input signal is other than 4:3, a part of the screen is displayed in black.

# The SET SETTING Menu

The SET SETTING menu is used for changing the settings of the projector.



## Menu Items

### STATUS (on-screen display)

Sets up the on-screen display.  
**ON:** Shows all of the on-screen displays.  
**OFF:** Turns off the on-screen displays except for the menus, a message when turning off the power, and warning messages.

### INPUT-A

Selects the RGB or component signal input from the INPUT A connector.

**Note**  
If the setting is not correct, "Please check INPUT-A setting." appears on the screen and the color of the picture becomes strange or the picture is not displayed.

### KEYSTONE MEMORY

Memorizes the data adjusted with DIGITAL KEYSTONE.

### DIGITAL KEYSTONE

Adjusts trapezoidal distortion of the picture that may occur depending on the projection angle.

**When the upside of the trapezoid is longer than the downside** □ : Sets to a plus value.

### LANGUAGE

Selects the language used in the menu and on-screen displays. Available languages are: English, French, German, Italian, Spanish, Japanese and Chinese.

### POWER SAVING

When set to ON, the projector goes into power saving mode if no signal is input for 10 minutes.

### SIRCS RECEIVER

Selects the remote control detectors (SIRCS receiver) on the front and rear of the projector.

**FRONT & REAR:** Activates both the front and rear detectors.

**FRONT:** Activates the front detector only.

**REAR:** Activates the rear detector only.

### LAMP TIMER

Indicates the total number of hours for which the lamp currently used has been operated.

## Maintenance

# Maintenance

## Replacing the Lamp

When it is time to replace the lamp, replace the lamp promptly with a new LMP-C120 Projector Lamp.

### When replacing the lamp after using the projector

Turn off the projector, then unplug the power cord.  
Wait for at least an hour for the lamp to cool.

### Caution

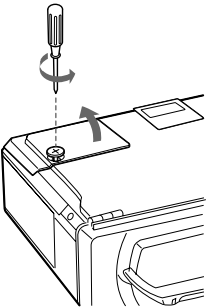
The lamp becomes a high temperature after turning off the projector with the I / ⏻ key. If you touch the lamp, you may scald your finger. When you replace the lamp, wait for at least an hour for the lamp to cool.

- 1 Place a protective sheet (cloth) beneath the projector. Turn the projector over so you can see its underside.

### Note

Be sure that the projector is stable after turning it over.

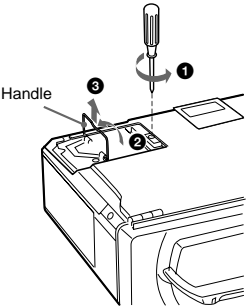
- 2 Open the lamp cover by loosening a screw with the Phillips screwdriver (supplied with the LMP-C120 Projector Lamp).



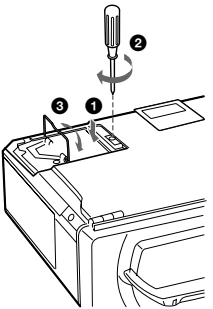
### Note

For safety sake, do not loosen any other screws.

- 3 Loosen the screw on the lamp unit with the Phillips screwdriver. Pull out the lamp unit by the handle.



- 4 Insert the new lamp all the way in until it is securely in place. Tighten the screw. Fold up the handle.





### Notes

- Be careful not to touch the glass surface of the lamp.
- The power will not turn on if the lamp is not secured properly.

- 5 Close the lamp cover and tighten the screws.

Maintenance

- 6 Turn the projector back over.
- 7 Connect the power cord and turn the projector to standby mode.
- 8 Press the following keys on the control panel in the following order for less than five seconds each: RESET, , , ENTER.

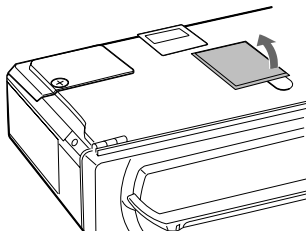
#### Notes

- Be sure to use the LMP-C120 Projector Lamp for replacement. If you use lamps other than LMP-C120, the projector may cause a malfunction.
- Be sure to turn off the projector and unplug the power cord before replacing the lamp.
- Do not put your hands into the lamp replacement spot, or not fall any liquid or object into it to avoid electrical shock or fire.

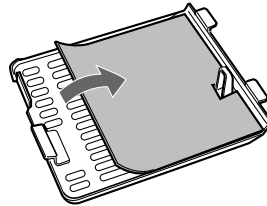
### Cleaning the Air Filter

The air filter should be cleaned every 300 hours. When it becomes difficult to remove the dust from the filter, replace the filter with a new one.  
To clean the air filter, follow the steps below:

- 1 Turn off the power and unplug the power cord.
- 2 Turn the projector over.



- 3 Remove the air filter cover.



- 4 Remove the dust from the filter with a vacuum cleaner.

- 5 Attach the air filter and replace the cover.


#### Notes

- If the air filter is excessively dirty, wash it with mild detergent solution and dry it in a shaded place. If the dust cannot be removed, replace the air filter with the supplied new one.
- Be sure to attach the air filter cover firmly; the power will not be turned on if it is not closed securely.
- The air filter has a face and a reverse side. Place the air filter so that it fits in a notch on the air filter cover.

## Troubleshooting

If the projector appears to be operating erratically, try to diagnose and correct the problem using the following instructions. If the problem persists, consult with qualified Sony personnel.

### Power

| Symptom   | Cause and Remedy   |
|---|--|
| The power is not turned on.                           | <ul style="list-style-type: none"> <li>• The power has been turned off and on with the I /  key at a short interval.                             <ul style="list-style-type: none"> <li>→ Wait for about 90 seconds before turning on the power (see page 24).</li> </ul> </li> <li>• The lamp cover is detached.                             <ul style="list-style-type: none"> <li>→ Close the lamp cover securely (see page 31).</li> </ul> </li> <li>• The air filter cover is detached.                             <ul style="list-style-type: none"> <li>→ Close the air filter cover securely (see page 32).</li> </ul> </li> </ul> |
| Both the LAMP/COVER and FAN/TEMP indicators light up. | <ul style="list-style-type: none"> <li>• The electrical system breaks down.                             <ul style="list-style-type: none"> <li>→ Consult with qualified Sony personnel.</li> </ul> </li> </ul>   |

### Picture

| Symptom  | Cause and Remedy   |
|--|--|
| No picture.  | <ul style="list-style-type: none"> <li>• Cable is disconnected or the connections are wrong.                             <ul style="list-style-type: none"> <li>→ Check that the proper connections have been made (see page 16).</li> </ul> </li> <li>• The picture is cut off.                             <ul style="list-style-type: none"> <li>→ Press the MUTING PIC key to release the muting function (see page 23).</li> </ul> </li> <li>• Input selection is incorrect.                             <ul style="list-style-type: none"> <li>→ Select the input source correctly using the INPUT key (see page 22).</li> </ul> </li> <li>• The computer signal is not set to output to an external monitor.                             <ul style="list-style-type: none"> <li>→ Set the computer signal to output to an external monitor (see page 16).</li> </ul> </li> <li>• The computer signal is set to output to both the LCD of the computer and external monitor.                             <ul style="list-style-type: none"> <li>→ Set the computer signal to output only to the external monitor (see page 16).</li> </ul> </li> </ul> |
| The picture is noisy.  | <ul style="list-style-type: none"> <li>• Noise may appear on the background depending on the combination of the numbers of dot input from the connector and numbers of pixel on the LCD panel.                             <ul style="list-style-type: none"> <li>→ Change the desktop pattern on the connected computer.</li> </ul> </li> </ul>   |
| The picture from INPUT A connector is colored strange.   | <ul style="list-style-type: none"> <li>• Setting for INPUT-A in the SET SETTING menu is incorrect.                             <ul style="list-style-type: none"> <li>→ Select RGB or COMPONENT for INPUT-A in the SET SETTING menu according to the input signal (see page 30).</li> </ul> </li> </ul>  |
| "Please check INPUT-A setting." appears in spite of inputting the correct signal from INPUT A. | <ul style="list-style-type: none"> <li>• Setting for INPUT-A in the SET SETTING menu is incorrect.                             <ul style="list-style-type: none"> <li>→ Select RGB or COMPONENT for INPUT-A in the SET SETTING menu according to the input signal (see page 30).</li> </ul> </li> </ul>  |

| Symptom                                      | Cause and Remedy   |
|--|--|
| On-screen display does not appear.           | <ul style="list-style-type: none"> <li>• STATUS in the SET SETTING menu has been set to OFF.<br/>→ Set STATUS in the SET SETTING menu to ON (see page 30).</li> </ul>  |
| Color balance is incorrect.                  | <ul style="list-style-type: none"> <li>• Picture has not been adjusted properly.<br/>→ Adjust the picture (see page 27).</li> <li>• Projector is set to wrong color system.<br/>→ Set COLOR SYS in the PICTURE CTRL menu to match the color system being input (see page 27).</li> </ul> |
| The picture is too dark.                     | <ul style="list-style-type: none"> <li>• Contrast or brightness has not been adjusted properly.<br/>→ Adjust the contrast or brightness in the PICTURE CTRL menu properly (see page 27).</li> </ul>  |
| The picture is not clear.                    | <ul style="list-style-type: none"> <li>• Picture is out of focus.<br/>→ Adjust the focus (see page 23).</li> <li>• Condensation has occurred on the lens.<br/>→ Leave the projector for about two hours with the power on.</li> </ul>  |
| The picture appears too small on the screen. | <ul style="list-style-type: none"> <li>• SHIFT in the INPUT SETTING menu has not been adjusted properly.<br/>→ Adjust SHIFT in the INPUT SETTING menu properly (see page 28).</li> </ul>   |
| The picture flickers.                        | <ul style="list-style-type: none"> <li>• DOT PHASE in the INPUT SETTING menu has not been adjusted properly.<br/>→ Adjust DOT PHASE in the INPUT SETTING menu properly (see page 28).</li> </ul>   |

## Sound

| Symptom  | Cause and Remedy  |
|--|---|
| No sound.  | <ul style="list-style-type: none"> <li>• Cable is disconnected or the connections are wrong.<br/>→ Check that the proper connections have been made (see page 16).</li> </ul> |
| When sound is input through AUDIO connector, sound comes through one channel only. | <ul style="list-style-type: none"> <li>• Monaural sound is being input through the AUDIO connector.<br/>→ Input stereo sound.</li> </ul>                                      |

## Remote Commander

| Symptom  | Cause and Remedy   |
|--|--|
| The Remote Commander does not work.                      | <ul style="list-style-type: none"> <li>• The Remote Commander batteries are dead.<br/>→ Replace with new batteries (see page 14).</li> <li>• The front/rear remote control detector is near the fluorescent lamp.<br/>→ Change the setting of SIRCS RECEIVER in the SET SETTING menu (see page 30).</li> </ul> |
| The joystick, R CLICK, or L CLICK key does not function. | <ul style="list-style-type: none"> <li>• The mouse port on the computer does not recognize the mouse cable.<br/>→ Restart the computer.</li> </ul>   |

## Others

| Symptom   | Cause and Remedy  |
|---|---|
| The LAMP/COVER indicator flashes.                     | <ul style="list-style-type: none"> <li>The lamp cover or the air filter cover is detached.<br/>→ Attach the cover securely (see page 31).</li> </ul>  |
| The LAMP/COVER indicator lights up.                   | <ul style="list-style-type: none"> <li>The lamp has reached the end of its life.</li> <li>→ Replace the lamp (see page 31).</li> <li>The lamp becomes a high temperature.<br/>→ Wait for 90 seconds to cool down the lamp and turn on the power again (see page 31).</li> </ul> |
| The FAN/TEMP indicator flashes.                       | <ul style="list-style-type: none"> <li>The fan is broken.<br/>→ Consult with qualified Sony personnel.</li> </ul>   |
| The FAN/TEMP indicator lights up.                     | <ul style="list-style-type: none"> <li>The internal temperature is unusually high.<br/>→ Check to see if nothing is blocking the ventilation holes.</li> </ul>  |
| Both the LAMP/COVER and FAN/TEMP indicators light up. | <ul style="list-style-type: none"> <li>The electrical system breaks down.<br/>→ Consult with qualified Sony personnel.</li> </ul>   |

## Warning Messages

Use the list below to check the meaning of the messages displayed on the screen.

| Message                           | Meaning and Remedy  |
|-----------------------------------|---|
| High temp.!<br>Lamp off in 1 min. | <ul style="list-style-type: none"> <li>Internal temperature is too high.               <ul style="list-style-type: none"> <li>→ Turn off the power.</li> <li>→ Check to see if nothing is blocking the ventilation holes.</li> </ul> </li> </ul>  |
| Frequency is out of range!        | <ul style="list-style-type: none"> <li>This input signal cannot be projected as the frequency is out of the acceptable range of the projector.               <ul style="list-style-type: none"> <li>→ Input a signal that is within the range of the frequency.</li> </ul> </li> <li>The resolution setting of the output signal of a computer is too high.               <ul style="list-style-type: none"> <li>→ Set the setting of output to SVGA (VPL-CS2) or XGA (VPL-CX1) (see page 16).</li> </ul> </li> </ul> |
| Please check INPUT-A setting.     | <ul style="list-style-type: none"> <li>You have input RGB signal from the computer when INPUT-A in the SET SETTING menu is set to COMPONENT.               <ul style="list-style-type: none"> <li>→ Set INPUT-A correctly (see page 30).</li> </ul> </li> </ul>   |

## Caution Messages

Use the list below to check the meaning of the messages displayed on the screen.

| Message         | Meaning and Remedy   |
|-----------------|--|
| NO INPUT        | <ul style="list-style-type: none"> <li>No input signal<br/>→ Check connections (see page 16).</li> </ul>           |
| Not applicable! | <ul style="list-style-type: none"> <li>You have pressed the wrong key.<br/>→ Press the appropriate key.</li> </ul> |

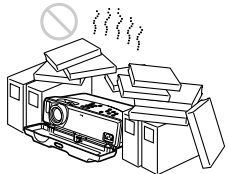
► Other

## Notes on Installation

### Unsuitable Installation

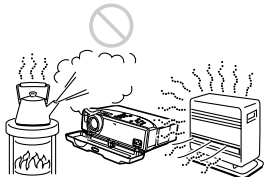
Do not install the projector in the following situations. These installations may cause malfunction or damage to the projector.

#### Poorly ventilated



- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes. When the internal heat builds up due to the block-up, the temperature sensor will function with the message "High temp.! Lamp off in 1 min." The power will be turned off automatically after one minute.
- Leave space of more than 30 cm (11 7/8 inches) around the unit.
- Be careful that the ventilation holes may inhale tininess such as a piece of paper.

#### Highly heated and humid



- Avoid installing the unit in a location where the temperature or humidity is very high, or temperature is very low.
- To avoid moisture condensation, do not install the unit in a location where the temperature may rise rapidly.

#### Very dusty

Avoid installing the unit in a location where there is a lot of dust; otherwise, the air filter will be obstructed. The dust blocking the air through the filter may cause raising the internal heat of the projector. Clean it up periodically.

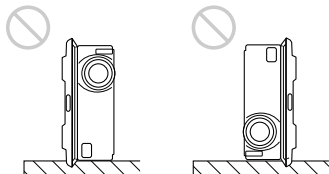


### Unsuitable Conditions

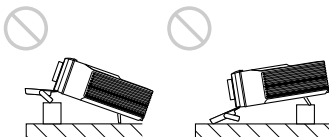
Do not use the projector under the following conditions.

#### Toppling the unit

Avoid using as the unit topples over on its side. It may cause malfunction.

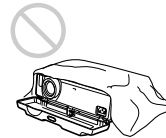


#### Tilting the unit out of the range of the adjuster setting



Do not install the unit other than on the floor. Avoid using when the unit is tilted out of the range of the adjuster setting. Such installation may cause malfunction.

#### Blocking the ventilation holes



Avoid using something to cover over the ventilation holes (exhaust/intake); otherwise, the internal heat may build up.

## Specifications

### Optical characteristics

|                         |   |
|-------------------------|---|
| Projection system       | 3 LCD panels, 1 lens, projection system   |
| LCD panel               | VPL-CS2: 0.7-inch TFT LCD panel, 1,440,000 pixels (480,000 pixels × 3)<br>VPL-CX1: 0.7-inch TFT LCD panel, 2,359,296 pixels (786,432 pixels × 3)  |
| Lens                    | 1.3 times zoom lens<br>f 28.7 to 37.4 mm/F 1.7 to 2.1   |
| Lamp                    | 120 W UHP   |
| Projection picture size | Range: 40 to 150 inches (diagonal measure)  |
| Light output            | VPL-CS2: ANSI lumen <sup>1)</sup> 600 lm<br>VPL-CX1: ANSI lumen <sup>1)</sup> 550 lm  |
| Throwing distance       | VPL-CS2 (When the SVGA signal is input)<br>40-inch: 1580 to 2010 mm (62 1/4 to 79 5/32 inches)<br>60-inch: 2390 to 3060 mm (94 1/8 to 120 1/2 inches)<br>80-inch: 3210 to 4100 mm (126 1/2 to 161 1/2 inches)<br>100-inch: 4030 to 5150 mm (158 11/16 to 202 7/8 inches)<br>120-inch: 4850 to 6200 mm (191 to 244 1/8 inches)<br>150-inch: 6080 to 7780 mm (239 1/2 to 306 3/8 inches)<br>VPL-CX1 (When the XGA signal is input)<br>40-inch: 1580 to 2020 mm (62 1/4 to 79 9/16 inches)<br>60-inch: 2400 to 3070 mm (94 1/2 to 121 inches)<br>80-inch: 3230 to 4120 mm (127 1/4 to 162 1/4 inches)<br>100-inch: 4050 to 5180 mm (159 1/2 to 204 inches)<br>120-inch: 4870 to 6230 mm (191 7/8 to 245 3/8 inches)<br>150-inch: 6100 to 7810 mm (240 1/4 to 307 5/8 inches) |

<sup>1)</sup> ANSI lumen is a measuring method of American National Standard IT 7.228.

Other

Electrical characteristics

|                             |   |
|-----------------------------|---|
| Color system                | NTSC3.58/PAL/SECAM/<br>NTSC4.43/PAL-M/PAL-N<br>system, switched automatically/<br>manually  |
| Resolution                  | VPL-CS2: 600 horizontal TV lines<br>(Video input)<br>800 × 600 dots (RGB input)<br>VPL-CX1: 750 horizontal TV<br>lines (Video input)<br>1024 × 768 dots (RGB input) |
| Acceptable computer signals | fH: 15 to 91 kHz<br>fV: 43 to 85 Hz   |
| Speaker                     | Stereo speakers system, 36 mm<br>(1 7/16 inches) diameter,<br>max. 0.5 W × 2  |

Input/Output

|             |   |
|-------------|---|
| Video input | VIDEO: phono type<br>Composite video: 1 Vp-p ±2 dB<br>sync negative (75 ohms<br>terminated)<br>S VIDEO: Y/C mini DIN 4-pin<br>type (male)<br>Y (luminance): 1 Vp-p ±2 dB<br>sync negative (75 ohms<br>terminated)<br>C (chrominance): burst<br>0.286 Vp-p ±2 dB (NTSC)<br>(75 ohms terminated),<br>burst 0.3 Vp-p ±2 dB (PAL)<br>(75 ohms terminated)   |
| INPUT A     | HD D-sub15-pin (female)<br>Analog RGB/component:<br>R/R-Y: 0.7 Vp-p ±2 dB<br>(75 ohms terminated)<br>G: 0.7 Vp-p ±2 dB<br>(75 ohms terminated)<br>G with sync/Y: 1 Vp-p ±2 dB<br>sync negative<br>(75 ohms terminated)<br>B/B-Y: 0.7 Vp-p ±2 dB<br>(75 ohms terminated)<br>SYNC/HD:<br>Composite sync input: 1-5 Vp-p<br>high impedance, positive/<br>negative<br>Horizontal sync input: 1-5 Vp-p<br>high impedance, positive/<br>negative<br>VD:<br>Vertical sync input: 1-5 Vp-p<br>high impedance, positive/<br>negative |

|                    |  |
|--------------------|--|
| MOUSE              | 6-pin (female)<br>(For details, see “Input signals<br>and adjustable/setting items”<br>on page40.) |
| AUDIO              | Stereo minijack<br>500 mVrms, impedance more<br>than 47 kilohms                                    |
| USB hub            | Up (B type: female) × 1<br>Down (A type: female) × 1   |
| Safety regulations | UL1950, CSA No. 950, FCC Class<br>B, IC Class B<br>NEMKO EN60950, CE, C-Tick                       |

General

|                       |  |
|-----------------------|--|
| Dimensions            | 277 × 70 × 214 mm (11 × 2 7/8 ×<br>8 1/2 inches) (w/h/d) (with the<br>front cover closed, without the<br>projection parts)   |
| Mass                  | Approx. 2.9 kg (6 lb 6 oz)   |
| Power requirements    | AC 100 to 240 V, 1.9–0.8A,<br>50/60 Hz   |
| Power consumption     | Max. 190 W<br>(Standby mode: 4.2 W)  |
| Heat dissipation      | 648.4 BTU  |
| Operating temperature | 0°C to 35°C (32°F to 95°F)   |
| Operating humidity    | 35% to 85% (no condensation)   |
| Storage temperature   | –20°C to 60°C (–4°F to 140°F)  |
| Storage humidity      | 10% to 90%   |
| Supplied accessories  | Remote Commander RM-PJM10<br>(1)<br>Size AA (R6) batteries (2)<br>HD D-sub 15 pin (2 m) (1)<br>(1-791-992-11)<br>PS/2 Mouse Cable (2 m) (1)<br>(1-792-424-11)<br>USB cable A type – B type (1)<br>(1-790-081-11)<br>Application software (1)<br>Carrying case (1)<br>AC power cord (1)<br>Air filter (for replacement) (1)<br>Operating Instructions (1)<br>Quick Reference Card (1)<br>Warranty Booklet (1) |

Design and specifications are subject to change  
without notice.

Optional accessories

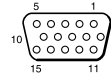
|                |   |
|----------------|---|
| Projector Lamp | LMP-C120 (for replacement)  |
| Signal Cable   | SMF-402 (HD D-sub 15-pin<br>(male) ↔ 3 × phono type<br>(male))                        |
| Monitor Cable  | SMF-410 (HD D-sub 15 pin<br>(male) ↔ HD D-sub 15 pin<br>(male))                       |
| Signal Adapter | ADP-20 (Macintosh ↔ HD D-<br>sub 15-pin)  |
| Screens        | 50-inch Portable Screen<br>VPS-50C <sup>1)</sup><br>100-inch Flat Screen<br>VPS-100FH |

Some of the items may not be available in some  
areas. For details, please consult your nearest  
Sony office.

1) VPS-50C may not be available in some areas.  
For details, please consult your nearest Sony  
office.

Pin assignment

INPUT A connector (HD D-sub 15-pin,  
female)



|   |         |    |           |
|---|---------|----|-----------|
| 1 | R/R-Y   | 9  | N.C.      |
| 2 | G/Y     | 10 | GND       |
| 3 | B/B-Y   | 11 | GND       |
| 4 | GND     | 12 | N.C.      |
| 5 | GND     | 13 | HD/C.Sync |
| 6 | GND (R) | 14 | VD        |
| 7 | GND (G) | 15 | N.C.      |
| 8 | GND (B) |    |           |

MOUSE connector (6-pin, female)



|   |      |
|---|------|
| 1 | DATA |
| 2 | N.C. |
| 3 | GND  |
| 4 | +5V  |
| 5 | CLK  |
| 6 | N.C. |

Other

Input signals and adjustable/  
setting items

PICTURE CTRL menu

| Item          | Input signal                         |                |     |     |
|---------------|--------------------------------------|----------------|-----|-----|
|               | Video<br>or S<br>video<br>(Y/C)      | Com-<br>ponent | RGB | B&W |
| CONTRAST      | ●                                    | ●              | ●   | ●   |
| BRIGHT        | ●                                    | ●              | ●   | ●   |
| COLOR         | ●                                    | ●              | —   | —   |
| HUE           | ●<br>(NTSC<br>3.58/<br>4.43<br>only) | —              | —   | —   |
| SHARP         | ●                                    | ●              | —   | ●   |
| D. PICTURE    | ●                                    | ●              | —   | ●   |
| GAMMA<br>MODE | —                                    | —              | ●   | —   |
| COLOR<br>TEMP | ●                                    | ●              | ●   | ●   |
| COLOR SYS     | ●                                    | —              | —   | ●   |

● : Adjustable/can be set  
— : Not adjustable/cannot be set

INPUT SETTING menu

| Item         | Input signal                    |                |     |     |
|--------------|---------------------------------|----------------|-----|-----|
|              | Video<br>or S<br>video<br>(Y/C) | Com-<br>ponent | RGB | B&W |
| DOT<br>PHASE | —                               | —              | ●   | —   |
| SIZE         | —                               | —              | ●   | —   |
| SHIFT        | —                               | —              | ●   | —   |
| SCAN<br>CONV | —                               | —              | ●   | —   |
| ASPECT       | ●                               | ●              | —   | ●   |

● : Adjustable/can be set  
— : Not adjustable/cannot be set

Preset signals

| Memory<br>No. | Preset signal           |                 | fH (kHz) | fV (Hz) | Sync                          | SIZE |
|---------------|-------------------------|-----------------|----------|---------|-------------------------------|------|
| 1             | Video 60 Hz             |                 | 15.734   | 59.940  | S on G/Y or<br>Composite Sync |      |
| 2             | Video 50 Hz             |                 | 15.625   | 50.000  |                               |      |
| 3             | 15k RGB/Component 60 Hz |                 | 15.734   | 59.940  | S on G/Y or<br>Composite Sync |      |
| 4             | 15k RGB/Component 50 Hz |                 | 15.625   | 50.000  |                               |      |
| 6             | 640 × 350               | VGA mode 1      | 31.469   | 70.086  | H-pos, V-neg                  | 800  |
| 7             |                         | VGA VESA 85 Hz  | 37.861   | 85.080  | H-pos, V-neg                  | 832  |
| 8             | 640 × 400               | PC-9801 Normal  | 24.823   | 56.416  | H-neg, V-neg                  | 848  |
| 9             |                         | VGA mode 2      | 31.469   | 70.086  | H-neg, V-pos                  | 800  |
| 10            |                         | VGA VESA 85 Hz  | 37.861   | 85.080  | H-neg, V-pos                  | 832  |
| 11            | 640 × 480               | VGA mode 3      | 31.469   | 59.940  | H-neg, V-neg                  | 800  |
| 12            |                         | Macintosh 13"   | 35.000   | 66.667  | H-neg, V-neg                  | 864  |
| 13            |                         | VGA VESA 72 Hz  | 37.861   | 72.809  | H-neg, V-neg                  | 832  |
| 14            |                         | VGA VESA 75 Hz  | 37.500   | 75.000  | H-neg V-neg                   | 840  |
| 15            |                         | VGA VESA 85 Hz  | 43.269   | 85.008  | H-neg V-neg                   | 832  |
| 16            |                         | SVGA VESA 56 Hz | 35.156   | 56.250  | H-pos, V-pos                  | 1024 |
| 17            | 800 × 600               | SVGA VESA 60 Hz | 37.879   | 60.317  | H-pos, V-pos                  | 1056 |
| 18            |                         | SVGA VESA 72 Hz | 48.077   | 72.188  | H-pos, V-pos                  | 1040 |
| 19            |                         | SVGA VESA 75 Hz | 46.875   | 75.000  | H-pos, V-pos                  | 1056 |
| 20            |                         | SVGA VESA 85 Hz | 53.674   | 85.061  | H-pos, V-pos                  | 1048 |
| 21            | 832 × 624               | Macintosh 16"   | 49.724   | 74.550  | H-neg, V-neg                  | 1152 |
| 22            | 1024 × 768              | XGA VESA 43 Hz  | 35.522   | 43.479  | H-pos, V-pos                  | 1264 |
| 23            |                         | XGA VESA 60 Hz  | 48.363   | 60.004  | H-neg V-neg                   | 1344 |
| 24            |                         | XGA VESA 70 Hz  | 56.476   | 70.069  | H-neg V-neg                   | 1328 |
| 25            |                         | XGA VESA 75 Hz  | 60.023   | 75.029  | H-pos, V-pos                  | 1312 |
| 26            |                         | XGA VESA 85 Hz  | 68.677   | 84.997  | H-pos, V-pos                  | 1376 |
| 27            | 1152 × 864              | SXGA VESA 70 Hz | 63.995   | 70.016  | H-pos, V-pos                  | 1472 |
| 28            |                         | SXGA VESA 75 Hz | 67.500   | 75.000  | H-pos, V-pos                  | 1600 |
| 29            |                         | SXGA VESA 85 Hz | 77.487   | 85.057  | H-pos, V-pos                  | 1568 |
| 30            | 1152 × 900              | Sunmicro LO     | 61.795   | 65.960  | H-neg, V-neg                  | 1504 |
| 31            |                         | Sunmicro HI     | 71.713   | 76.047  | H-neg, V-neg                  | 1472 |
| 32            | 1280 × 960              | SXGA VESA 60 Hz | 60.000   | 60.000  | H-pos, V-pos                  | 1800 |
| 33            |                         | SXGA VESA 75 Hz | 75.000   | 75.000  | H-pos, V-pos                  | 1728 |

Other

| Memory No. | Preset signal |                 | fH (kHz) | fV (Hz) | Sync         | SIZE                                   |
|------------|---------------|-----------------|----------|---------|--------------|--|
| 34         | 1280 × 1024   | SXGA VESA 43 Hz | 46.433   | 43.436  | H-pos, V-pos | 1696                                   |
| 35         |               | SGI-5           | 53.316   | 50.062  | S on G       | 1680                                   |
| 36         |               | SXGA VESA 60 Hz | 63.974   | 60.013  | H-pos, V-pos | 1696                                   |
| 37         |               | SXGA VESA 75 Hz | 79.976   | 75.025  | H-pos, V-pos | 1688                                   |
| 38         |               | SXGA VESA 85 Hz | 91.146   | 85.024  | H-pos, V-pos | 1012<br>(VPL-CS2)<br>1296<br>(VPL-CX1) |

**Note**

When a signal other than the preset signals shown above is input, the picture may not appear properly.

**Warning on power connection**

Use a proper power cord for your local power supply.

|                         | The United States,<br>Canada |          | Continental<br>Europe | UK, Ireland,<br>Australia,<br>Newzealand | Japan    |
|-------------------------|------------------------------|----------|-----------------------|--|----------|
| Plug type               | VM0233                       | 290B     | YP-12A                | __ 1)                                    | VM1296   |
| Female end              | VM0089                       | 386A     | YC-13B                | VM0310B                                  | VM10505  |
| Cord type               | SJT                          | SJT      | H05VV-F               | N13237/CO-228                            | HVCTF    |
| Rated Voltage & Current | 10A/125V                     | 10A/125V | 10A/250V              | 10A/250V                                 | 13A/125V |
| Safety approval         | UL/CSA                       | UL/CSA   | VDE                   | VDE                                      | DENTORI  |

**Note**

1) Use an appropriate rating plug which is applied to local regulations.

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# SONY

4-079-835-01 (1)

## 早わかりカード / Quick Reference Card / Carte de référence rapide / Tarjeta de referencia rápida / Kurzreferenz / Scheda di riferimento rapido

VPL-CS2/VPL-CX1

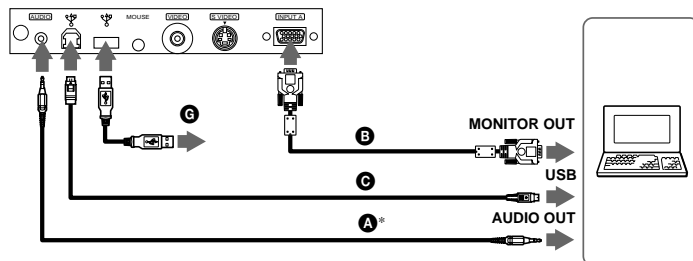
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### 接続 / Connections / Connexions / Conexiones / Anschlüsse / Collegamenti

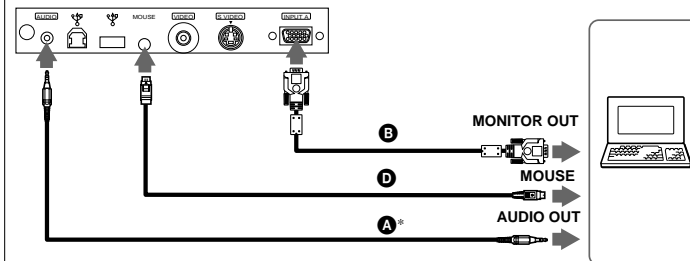
- A** ステレオオーディオ接続ケーブル / Stereo audio connecting cable / Câble de connexion audio stéréo / Cable de conexión de audio estéreo / Stereo-Audioverbindungskabel / Cavo di collegamento audio stereo
- B** HD D-sub 15ピンケーブル / HD D-sub 15-pin cable / Câble HD D-sub à 15 broches / Cable HD D-sub 15 pines / 15poliges D-Sub-Kabel hoher Dichte / Cavo HD D-sub a 15 piedini
- C** USB接続ケーブル / USB cable / Câble USB / Cable USB / USB-Kabel / Cavo USB
- D** マウスケーブル / Mouse cable / Câble de souris / Cable de ratón / Maus kabel / Cavo del mouse
- E** Sビデオ接続ケーブル / S-video cable / Câble S-vidéo / Cable de vidéo S / S-Videokabel / Cavo S-Video
- F** ビデオ接続ケーブル / Video cable / Câble vidéo / Cable de vidéo / Videokabel / Cavo video
- G** 他のUSB機器を接続 / Connect another USB equipment / Raccordez un autre appareil USB / Conexión de otro equipo USB / Anschließen eines anderen USB-Geräts / Collegare un altro apparecchio USB

コンピューターの接続 / Connecting a computer / Raccordement à un ordinateur / Conexión con ordenador / Anschließen an einen Computer / Collegamento a un computer

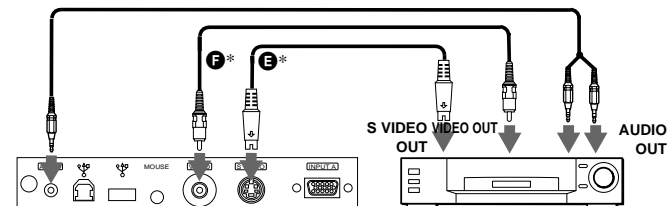
- USBマウスやUSB対応周辺機器を使う場合 / When you use a USB mouse and USB equipment / Lorsque vous utilisez une souris USB et un appareil USB / Si utiliza un ratón USB y un equipo USB / Wenn Sie eine USB-Maus und ein USB-Gerät verwenden / Quando si utilizza un mouse USB e un apparecchio USB



- PS/2 マウスを使う場合 / When you use a PS/2 mouse / Lorsque vous utilisez une souris PS/2 / Si utiliza un ratón PS/2 / Wenn Sie eine PS/2-Maus verwenden / Quando si utilizza un mouse PS/2



ビデオ機器の接続 / Connecting a VCR / Raccordement à un magnétoscope / Conexión con una videogradora / Anschließen an einen Videorecorder / Collegamento a un videoregistratore

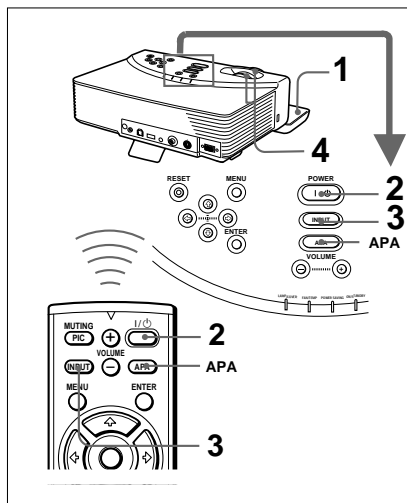


\* 別売り / not supplied / non fourni / no suministrado / nicht mitgeliefert / non in dotazione

### 投射距離 / Projection Distances / Distances de projection / Distancias de proyección / Projektionsentfernungen / Distanze di proiezione

| スクリーンサイズ (インチ) / Screen size(inches) / Taille de l'écran (pouces) / Tamaño de la pantalla (pulgadas) / Projektions-schirmgröße (Zoll) / Dimensione schermo (pollici) | 距離 (m) / Distance (m (feet)) / Distance (m (pieds)) / Distancia (m (pies)) / Abstand (m) / Distanza (m) |
|--|---|
| 40   | 1.6–2.0 (5.2–6.6)   |
| 60   | 2.4–3.1 (7.8–10.0)  |
| 80   | 3.2–4.1 (10.5–13.5)   |
| 100  | 4.0–5.2 (13.2–16.9)   |
| 120  | 4.9–6.2 (15.9–20.3)   |
| 150  | 6.1–7.8 (20.0–25.5)   |

## 基本操作 / Basic Operation / Opération de base / Operación básica / Grundfunktion / Operazione di base



## 日本語

- 1 フロントカバーを開き、電源コードをコンセントに差し込み、各機器の接続を行う。
- 2 I / ⏻ キーを押して、電源を入れる。
- 3 接続した機器の電源を入れ、INPUTキーを押して、「入力A」または「ビデオ」、「Sビデオ」を選ぶ。
- 4 ズームリングを回して画面の大きさを、フォーカスリングを回してフォーカスを調整する。

コンピューター画像の画質を自動調整するには  
APA (Auto Pixel Alignment) キーを押してください。

画面が台形に映っているときは  
初期設定メニューの「デジタル台形補正」で調整します。

画面を拡大するには  
D ZOOM + キーを押し、↑/↓/←/→ キーで拡大したい位置にハイライト表示を移動し、再度D ZOOM + キーを押します。

## English

- 1 Open the front cover, plug the AC power cord into the wall outlet, then connect all equipment.
- 2 Press the I / ⏻ key to turn on the projector.
- 3 Turn on equipment connected to the projector. Press the INPUT key to select "INPUT-A", "VIDEO" or "S-VIDEO".
- 4 Turn the zoom ring to adjust the size of the picture, and turn the focus ring to adjust the focus.

**To adjust the picture of computer automatically**  
Press the APA (Auto Pixel Alignment) key.

**To correct the trapezoid**  
Correct the trapezoid of the picture by changing the DIGITAL KEYSTONE value in the SET SETTING menu.

**To enlarge the image**  
Press the D ZOOM + key. Using an arrow key (↑/↓/←/→), move the highlight portion to the point you want to enlarge. Press the D ZOOM + key again.

## Français

- 1 Ouvrez le volet frontal, branchez le câble d'alimentation sur une prise murale et raccordez ensuite tous les appareils.
- 2 Appuyez sur la touche I / ⏻ pour mettre le projecteur sous tension.
- 3 Mettez sous tension l'appareil raccordé au projecteur. Appuyez sur la touche INPUT pour sélectionner "ENT.A", "VIDEO" ou "S-VIDEO".
- 4 Tournez la bague de zoom pour ajuster la taille de l'image et tournez la bague de mise au point pour ajuster la mise au point.

**Pour régler automatiquement l'image de l'ordinateur**

Appuyez sur la touche APA (alignement automatique des pixels).

**Pour corriger la distorsion trapézoïdale**  
Corrigez la distorsion trapézoïdale en changeant la valeur TRAPEZE NUMBER. dans le menu REGLAGE. INSTAL.

**Pour agrandir l'image**  
Appuyez sur la touche D ZOOM +. A l'aide d'une touche fléchée (↑/↓/←/→), déplacez la partie en surbrillance vers le point que vous souhaitez agrandir. Appuyez de nouveau sur la touche D ZOOM +.

## Español

- 1 Abra la tapa frontal, enchufe el cable de alimentación de CA en la toma mural y, a continuación, conecte todo el equipo.
- 2 Pulse la tecla I / ⏻ para encender el proyector.
- 3 Encienda el equipo conectado al proyector. Pulse la tecla INPUT para seleccionar "ENTRAD A", "VIDEO" o "S-VIDEO".
- 4 Gire el anillo de zoom para ajustar el tamaño de la imagen, y gire el anillo de enfoque para ajustar el enfoque.

**Para ajustar la imagen del ordenador automáticamente**  
Pulse la tecla APA (Alineación automática de píxeles).

**Para corregir la distorsión trapezoidal**  
Corrija la distorsión trapezoidal de la imagen cambiando el valor de DIST TRAP DIGIT del menú AJUSTE.

**Para ampliar la imagen**  
Pulse la tecla D ZOOM +. Mediante una tecla de flecha (↑/↓/←/→), desplace la parte resaltada al punto que desee aumentar. Vuelva a pulsar la tecla D ZOOM +.

## Deutsch

- 1 Öffnen Sie die Abdeckung vorn, stecken Sie das Netzkabel in die Steckdose, und schließen Sie alle Geräte an.
- 2 Schalten Sie den Projektor mit der Taste I / ⏻ ein.
- 3 Schalten Sie die an den Projektor angeschlossenen Geräte ein. Wählen Sie mit der Taste INPUT "EING.A", "VIDEO" oder "S-VIDEO" aus.
- 4 Stellen Sie durch Drehen des Zoom-Rings die Größe des Bildes und durch Drehen des Fokussierings den Fokus ein.

**So lassen Sie das Bild des Computers automatisch einstellen**

Drücken Sie die Taste APA (automatische Pixelausrichtung).

**So korrigieren Sie die Trapezverzerrung**  
Korrigieren Sie die Trapezverzerrung des Bildes, indem Sie den Wert für TRAPEZE DIGITAL im Menü EINSTELLUNG ändern.

**So vergrößern Sie das Bild**  
Drücken Sie die Taste D ZOOM +. Verschieben Sie den hervorgehobenen Bildbereich mit den Pfeiltasten (↑/↓/←/→) an die Stelle, die vergrößert werden soll. Drücken Sie die Taste D ZOOM + erneut.

## Italiano

- 1 Aprire il coperchio anteriore, inserire l'alimentatore CA nella presa a muro, quindi collegare tutti gli apparecchi.
- 2 Per accendere il proiettore, premere il tasto I / ⏻.
- 3 Accendere l'apparecchiatura collegata al proiettore. Premere il tasto INPUT per selezionare "INGRE A", "VIDEO" o "S-VIDEO".
- 4 Per regolare le dimensioni dell'immagine, ruotare il regolatore dello zoom, per regolare la messa a fuoco, ruotare il regolatore della focalizzazione.

**Per regolare automaticamente l'immagine del computer**  
Premere il tasto APA (Allineamento automatico dei pixel).

**Per correggere la distorsione dell'immagine**  
Correggere l'immagine distorta modificando il valore di KEYSTONE DIGIT. nel menu REGOLAZ.

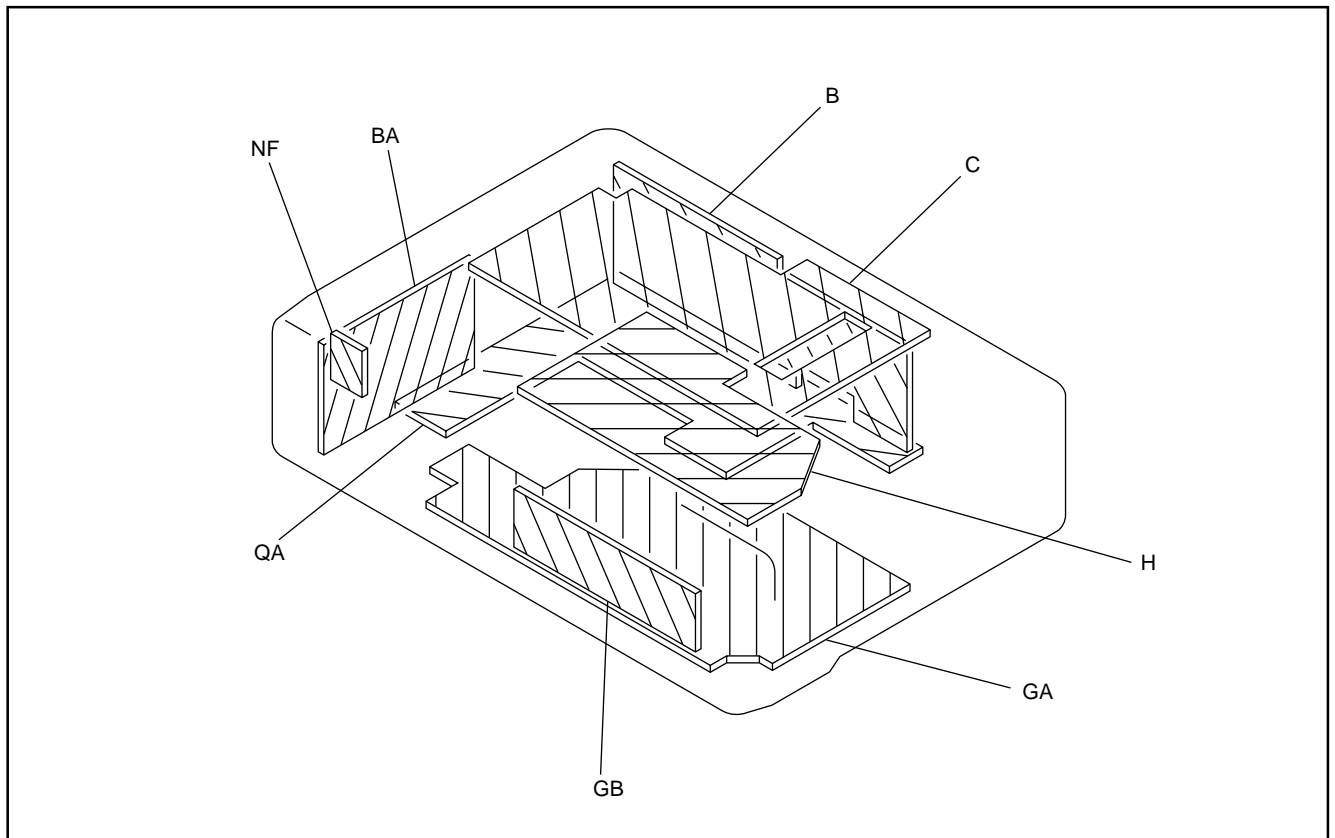
**Per ingrandire l'immagine**  
Premere il tasto D ZOOM +. Per spostare la parte evidenziata sul punto che si desidera ingrandire, utilizzare uno dei tasti direzionali (↑/↓/←/→). Premere di nuovo il tasto D ZOOM +.



## Section 2

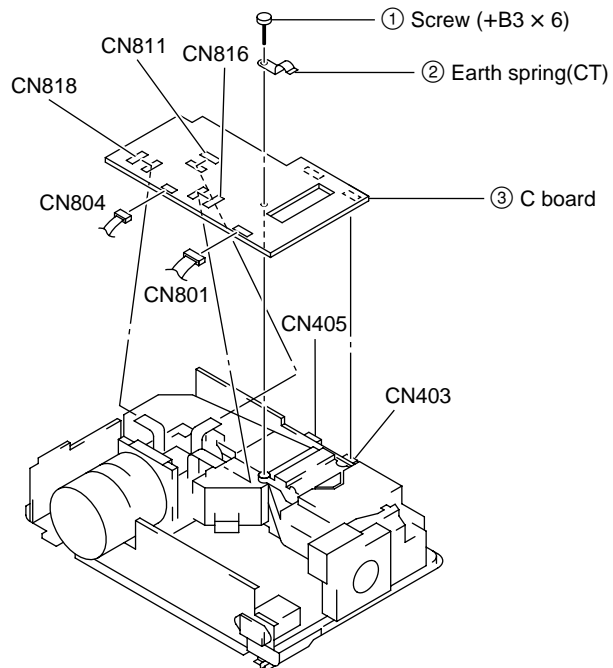
### Service Informations

#### 2-1. Circuit Boards Location



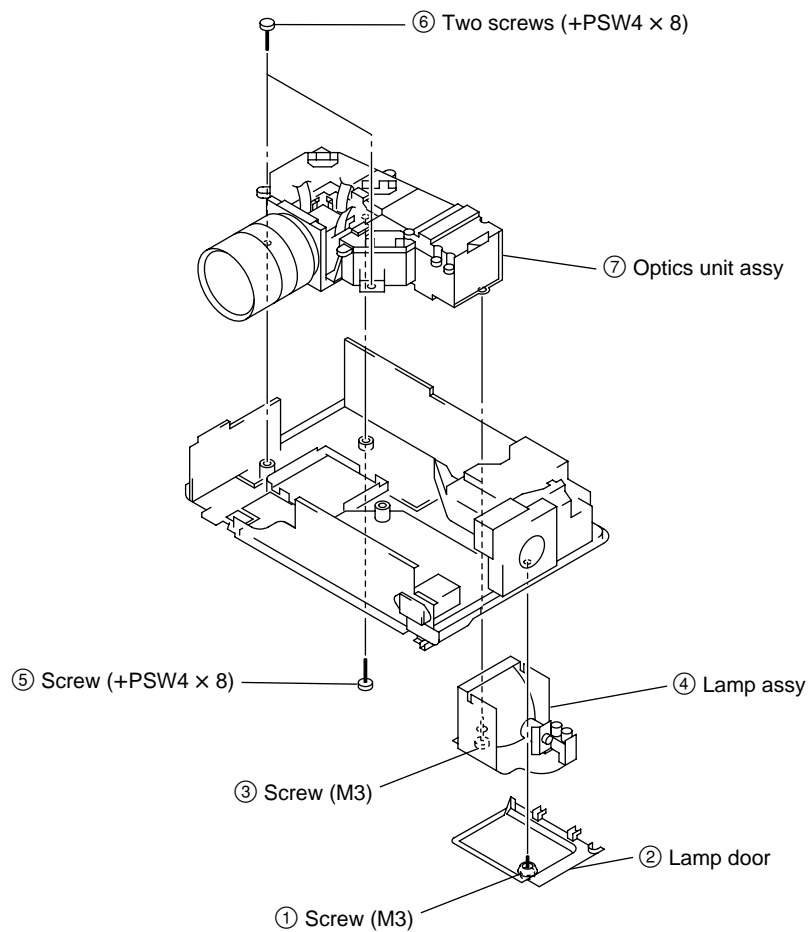


### 2-2-3. C Board Removal



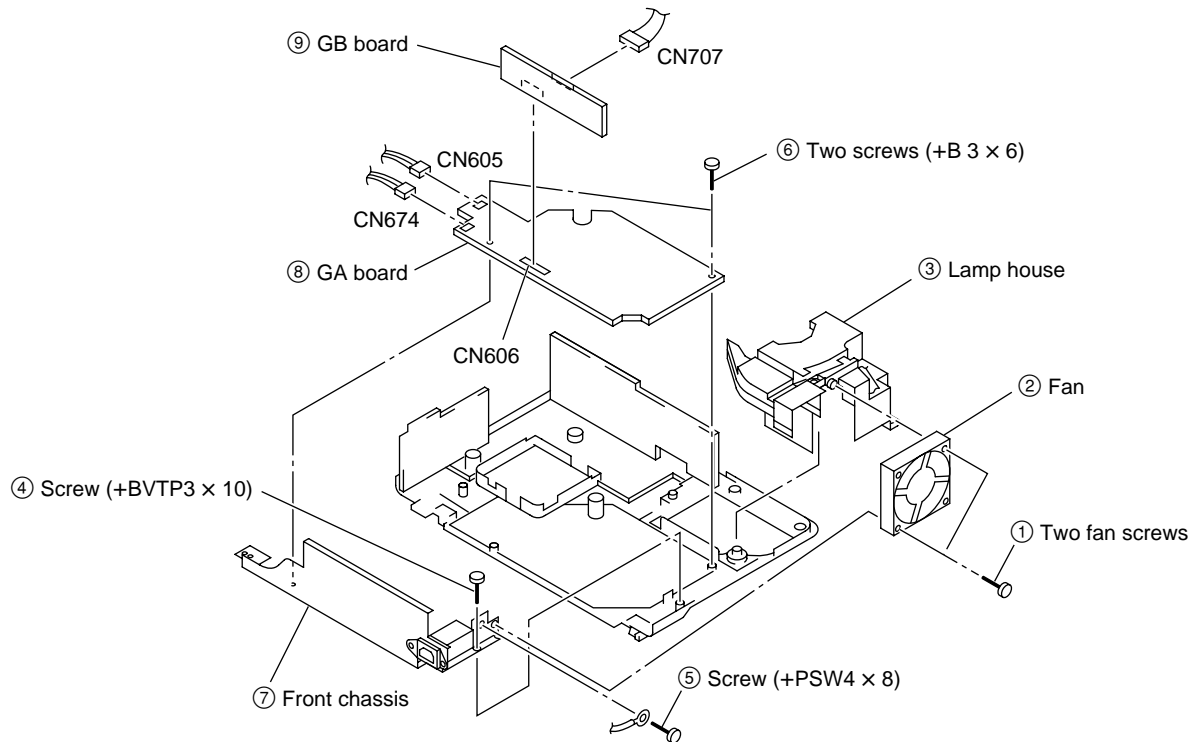
### 2-2-4. Optics Unit Assy Removal

- Remove the C Board. (Refer to Section 2-2-3.)



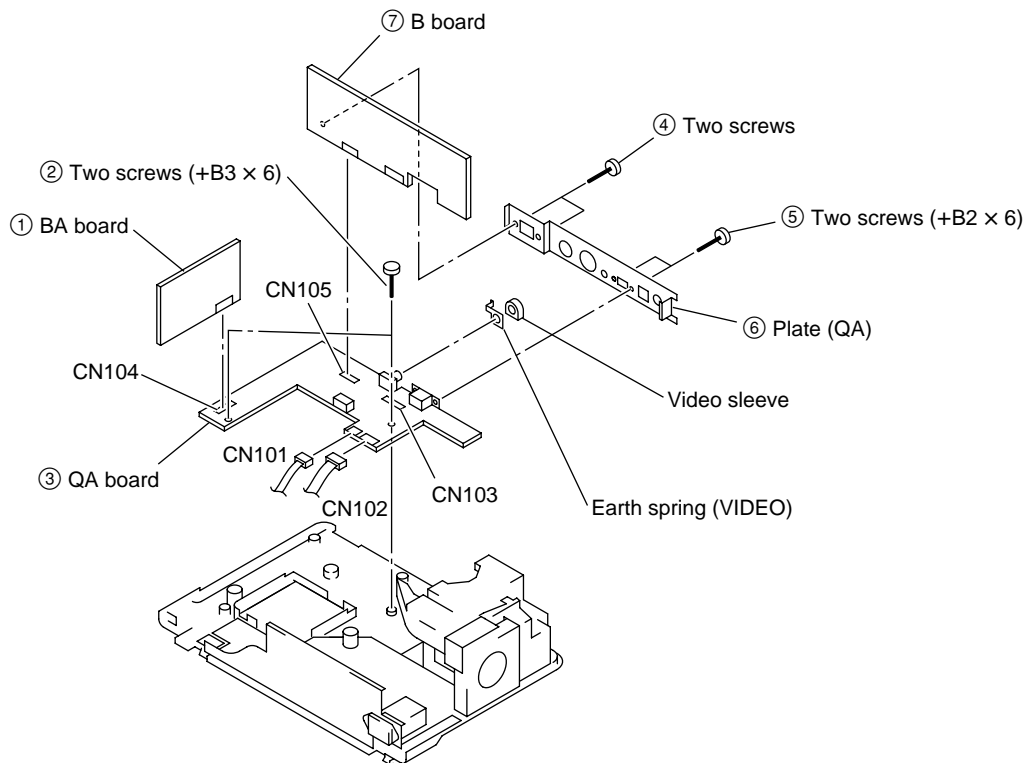
## 2-2-5. GA and GB Boards Removal

- Remove the Optics unit assy. (Refer to Section 2-2-4.)



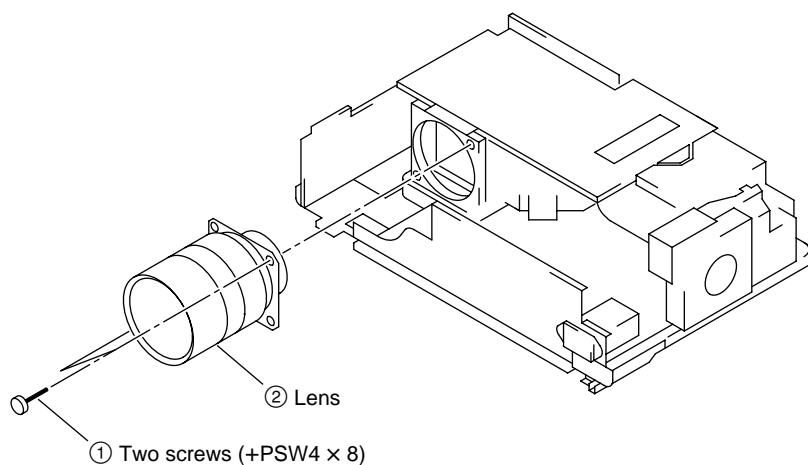
## 2-2-6. B, BA and QA Boards Removal

- Remove the Optics unit assy. (Refer to Section 2-2-4.)



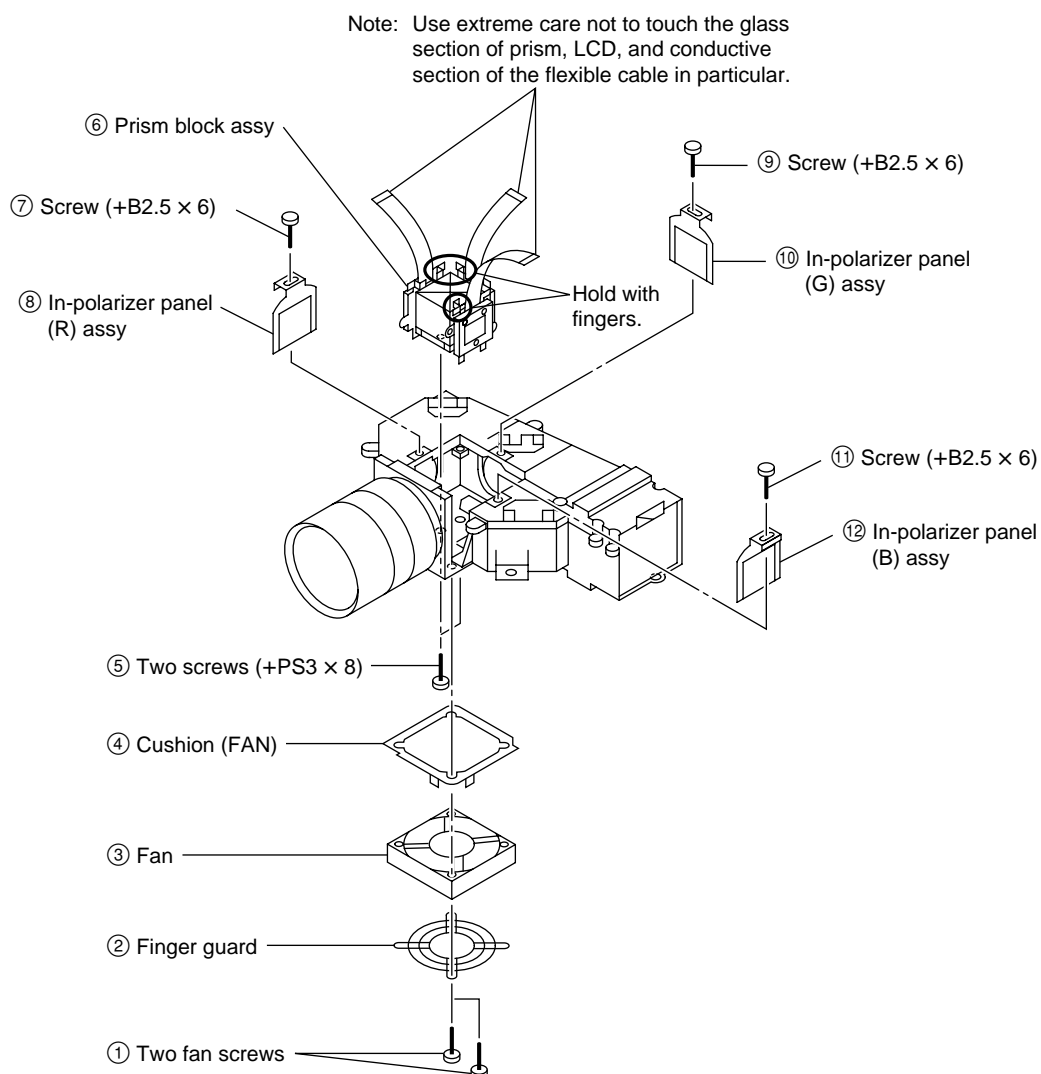


## 2-2-7. Lens Removal

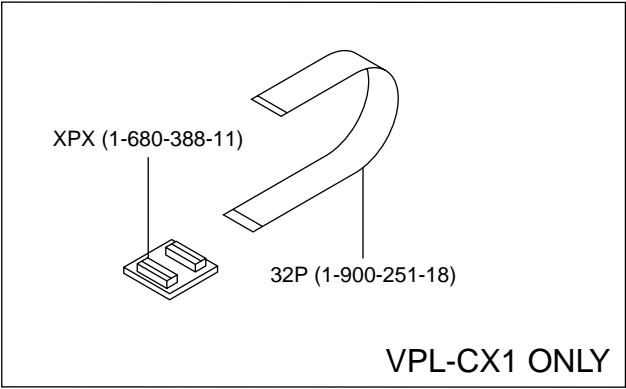
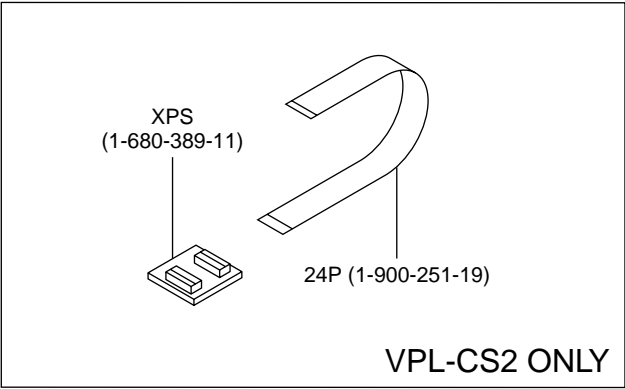
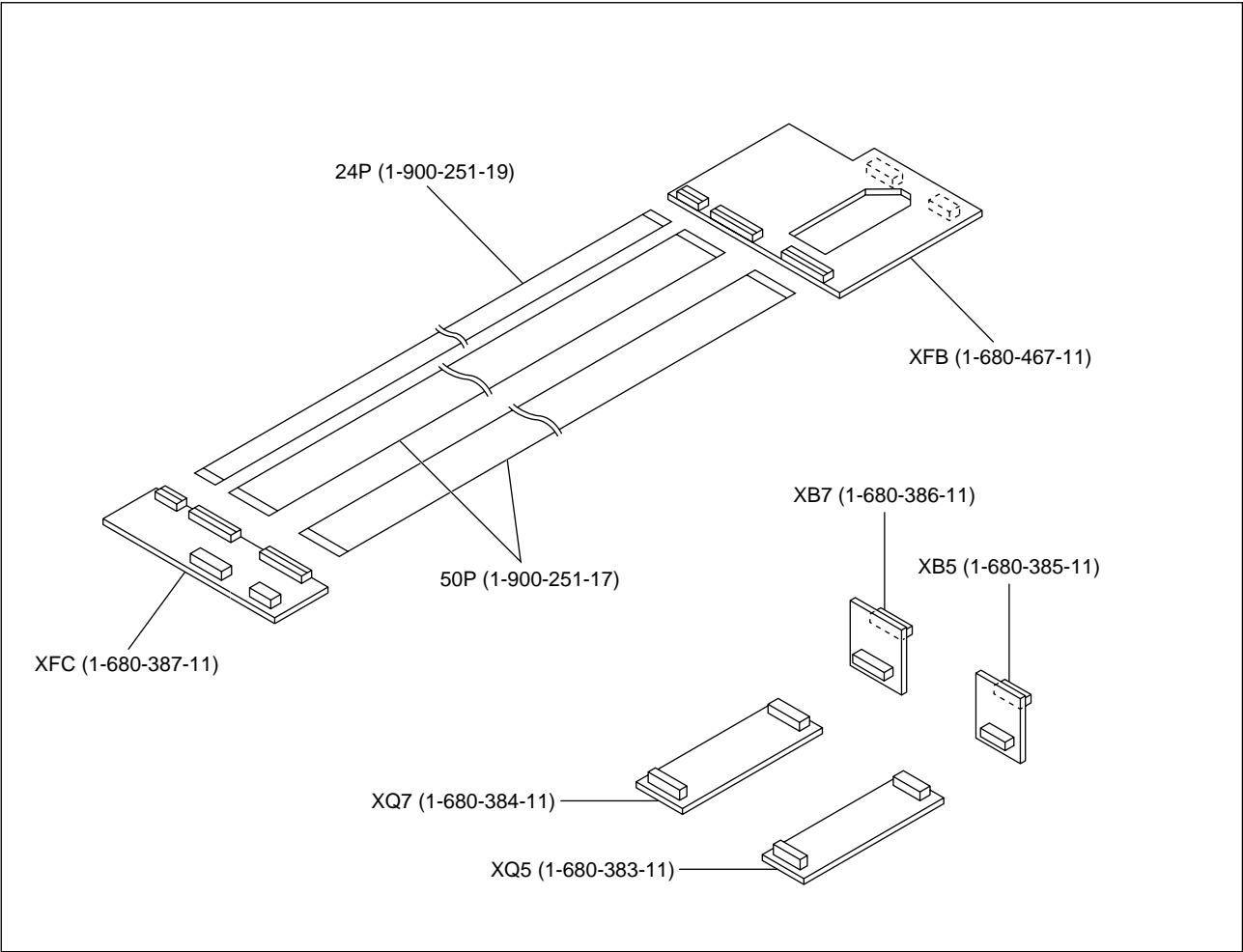


## 2-2-8. Prism Block Assy and In-polarizer Panel Assy Removal

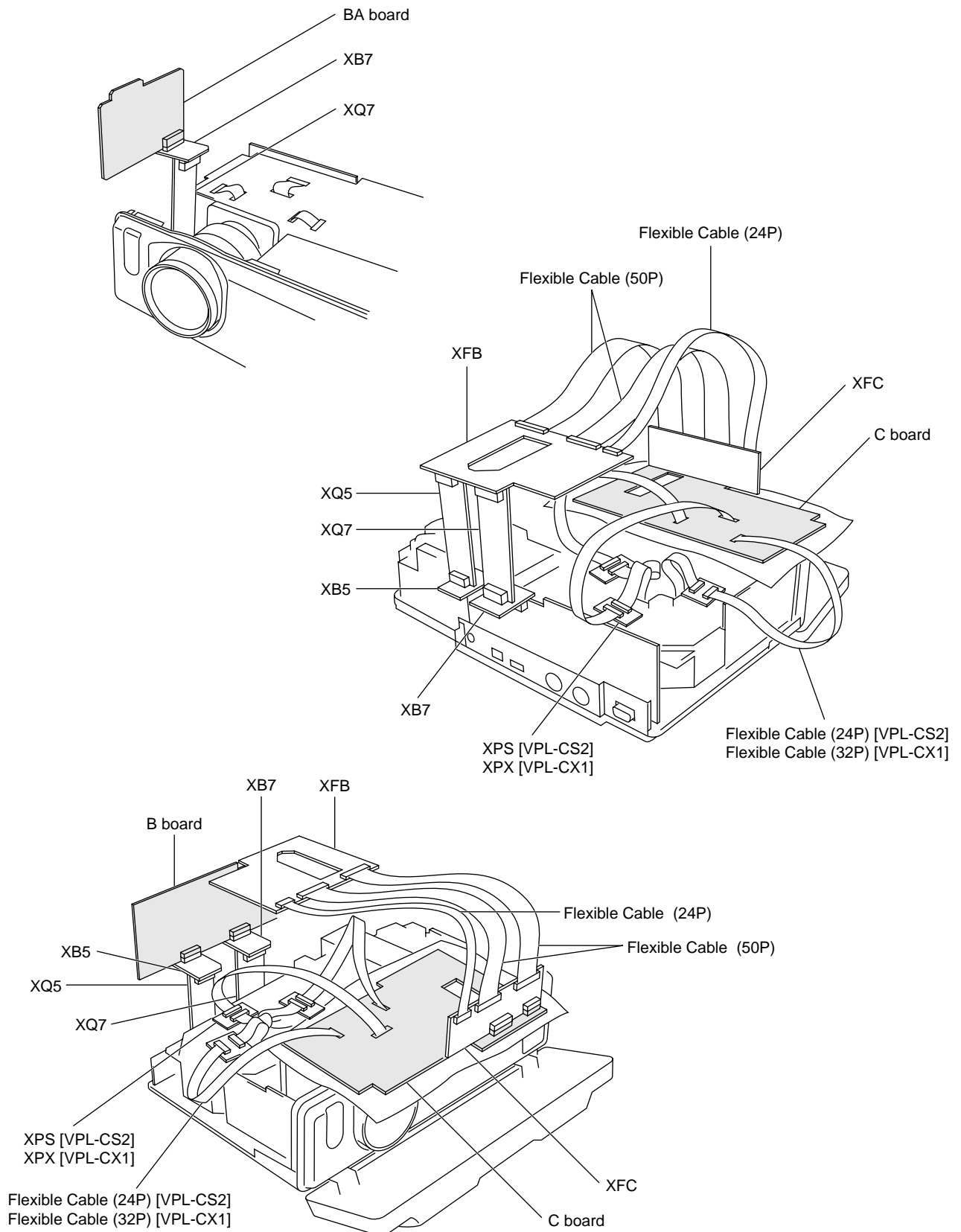
- Remove the Optics unit assy. (Refer to section 2-2-4.)



2-2-9. Extension Boards and Flexible Cables



## 2-2-10. Extension Boards Connection





## Section 3

### Electrical Adjustments

#### 3-1. Preparations

##### 3-1-1. Equipment Required

- Oscilloscope  
Tektronix 2465 or equivalent  
(bandwidth: 350 MHz or more)
- NTSC, PAL, SECAM component signal generator  
Tektronix TG2000 + AVG1 (optional module) + AWVG1 (optional module) or equivalent
- VG (Programmable video signal generator)  
VG814 or equivalent
- Digital voltmeter  
Advantest TR6845 or equivalent
- Luminance meter

**Note:** Perform the following adjustments at least 5 minutes after turning on the power.

##### 3-1-2. Optical Unit Adjustment

Drive the cooling fan and turn on the lamp.

##### 1) Mirror Adjustment

Set the screen size to 80-inch at the wide-end.

1. Set the unit in green-only.
2. Adjust the blanking sections at the top, bottom, left, and right for minimum by moving the adjusting plate of the G-channel mirror (OPT).
3. Tighten the adjusting plate fixing screws.
4. Set the unit in cyan.
5. Adjust the blanking sections at the top, bottom, left, and right for minimum by moving the adjusting plate of the B-channel mirror (OPT), and then maximize the intensity of the blue.
6. Tighten the adjusting plate fixing screws.
7. Set the unit in all white.
8. Adjust the blanking sections at the top, bottom, left, and right for minimum by moving the adjusting plate of the R-channel's first mirror (OPT), and then maximize the intensity of the red.
9. Tighten the adjusting plate fixing screws.
10. Secure the six adjusting plate fixing screws using a torque screwdriver.  
Tightening torque: 8 kgf/cm
11. Make sure that the deviation of the lighting range is within the specific range.

##### 2) Polarizing Plate Adjustment

1. Attach the extension cable and the extension flexible cable to the C board, and input the RGB all black (SVGA 0 IRE Flat Field) signal.
2. Move the red, green, and blue polarizing plates gradually to adjust the black level.
3. Secure the fixing screws using the screwdriver.

**Note:** When tightening the six fixing screws, be sure to push the polarizing plate toward the radiating side.

##### 3-1-3. Factory Mode Setting

1. Make sure that the STATUS in the menu is ON.
2. Exit the menu.
3. Press the keys in the following ORDER:  
“ENTER” → “ENTER” → “LEFT” → “ENTER”
4. The message “Do you wish to enter into the FACTORY MODE?” will be displayed.
5. Select YES.

#### 3-2. V-COM Adjustment

1. Input the green-only 50 IRE all white signal to INPUT-A.
2. Set the CONTRAST to 50 and BRIGHT to 50.
3. Set the screen to G VCOM adjustment of “Device Adjust.”  
Adjust the G VCOM so that the vertical line on the screen is minimum.
4. Input the red-only and blue-only 50 IRE all white signal respectively and adjust R VCOM and B VCOM respectively so that the vertical line becomes minimum.
5. Save the value adjusted.

### 3-3. Adjustment Item Initialize Data

| Menu Title    | Item Name           | Memory Name     |           |         |          |                  |               |              |             |            |
|---------------|---------------------|-----------------|-----------|---------|----------|------------------|---------------|--------------|-------------|------------|
|               |                     | Set<br>Memory   | CH Memory |         |          | Status<br>Memory | W/B Memory    |              |             |            |
|               |                     |                 | VIDEO     | S VIDEO | INPUT-A  |                  | VIDEO<br>HIGH | VIDEO<br>LOW | RGB<br>HIGH | RGB<br>LOW |
| PICTURE CTRL  | CONTRAST            |                 | 80        | 80      | 80       |                  |               |              |             |            |
|               | BRIGHT              |                 | 50        | 50      | 50       |                  |               |              |             |            |
|               | COLOR               |                 | 50        | 50      | 50       |                  |               |              |             |            |
|               | HUE                 |                 | 50        | 50      | 50       |                  |               |              |             |            |
|               | SHARP               |                 | 50        | 50      | 50       |                  |               |              |             |            |
|               | D.PICTURE           |                 | OFF       | OFF     | OFF      |                  |               |              |             |            |
|               | COLOR TEMP          |                 | LOW       | LOW     | HIGH     |                  |               |              |             |            |
|               | COLOR SYS           |                 | AUTO      | AUTO    | -        |                  |               |              |             |            |
|               | GAMMA MODE          |                 | -         | -       | GRAPHICS |                  |               |              |             |            |
|               | VOLUME              |                 | 50        | 50      | 50       |                  |               |              |             |            |
| INPUT SETTING | ASPECT              |                 |           |         |          | 4 : 3 (*)        |               |              |             |            |
|               | SIZE H              |                 |           |         |          | *                |               |              |             |            |
|               | SHIFT               |                 |           |         |          | *                |               |              |             |            |
|               | SCAN CONV           |                 |           |         |          | ON (*)           |               |              |             |            |
|               | DOT PHASE           |                 |           |         |          | 15 (*)           |               |              |             |            |
| SET SETTING   | STATUS              | ON              |           |         |          |                  |               |              |             |            |
|               | INPUT-A             | RGB             |           |         |          |                  |               |              |             |            |
|               | KEYSTONE MEMORY     | ON              |           |         |          |                  |               |              |             |            |
|               | DIGITAL KEYSTONE    | OFF             |           |         |          |                  |               |              |             |            |
|               | LANGUAGE            | ENGLISH         |           |         |          |                  |               |              |             |            |
|               | POWER SAVING        | OFF             |           |         |          |                  |               |              |             |            |
|               | SIRCS RECEIVER      | FRONT&REAR      |           |         |          |                  |               |              |             |            |
|               | LAMP TIMER          | INDICATION ONLY |           |         |          |                  |               |              |             |            |
| INFORMATION   | fH                  | INDICATION ONLY |           |         |          |                  |               |              |             |            |
|               | fV                  | INDICATION ONLY |           |         |          |                  |               |              |             |            |
|               | ROM Ver             | INDICATION ONLY |           |         |          |                  |               |              |             |            |
|               | OPERATION TIMER     | INDICATION ONLY |           |         |          |                  |               |              |             |            |
|               | PREVIOUS LAMP TIMER | INDICATION ONLY |           |         |          |                  |               |              |             |            |
| W/B ADJUST    | GAIN R              |                 |           |         |          |                  | 64            | 64           | 64          | 64         |
|               | GAIN G              |                 |           |         |          |                  | 64            | 60           | 64          | 60         |
|               | GAIN B              |                 |           |         |          |                  | 64            | 60           | 64          | 60         |
|               | BIAS R              |                 |           |         |          |                  | 128           | 128          | 128         | 128        |
|               | BIAS G              |                 |           |         |          |                  | 128           | 128          | 128         | 128        |
|               | BIAS B              |                 |           |         |          |                  | 128           | 128          | 128         | 128        |

\* : “DOT PHASE, SIZE H, SHIFT H/V, SCAN CONV and ASPECT” in the “INPUT SETTING” menu have an initial value respectively in accordance with the input signal (PRESET MEMORY No.).

Note : There are nonadjustable items in accordance with the input signal.

| Device Name | Item Name | Memory Name    |                      |                           |     |                |                  | Remarks     |
|-------------|-----------|----------------|----------------------|---------------------------|-----|----------------|------------------|-------------|
|             |           | Set<br>Memory  | Chroma Memory        |                           |     | Reso<br>Memory | Status<br>Memory |             |
|             |           |                | NT358,NT443<br>B&W60 | PAL,PALM/N<br>SECAM,B&W50 | YUV |                |                  |             |
| RGB MTRX/   | CONTRAST  |                | 49                   | 47                        | 47  |                |                  |             |
|             | BRIGHT    |                | 35                   | 35                        | 35  |                |                  | Fixed Value |
|             | SUB HUE   |                | 8                    | 8                         | 7   |                |                  |             |
|             | SUB BRT   |                | 7                    | 7                         | 7   |                |                  | Fixed Value |
|             | R-Y/R     |                | 12                   | 10                        | 11  |                |                  |             |
|             | R-Y/B     |                | 12                   | 12                        | 13  |                |                  |             |
|             | G-Y/R     |                | 7                    | 5                         | 6   |                |                  |             |
|             | G-Y/B     |                | 6                    | 5                         | 5   |                |                  |             |
|             | VIDEO CON |                | 5                    | 7                         | 7   |                |                  |             |
|             | VIDEO COL |                | 6                    | 7                         | 7   |                |                  |             |
|             | YUV CON   |                | 7                    | 7                         | 7   |                |                  |             |
|             | YUV COL   |                | 7                    | 7                         | 7   |                |                  |             |
|             | SUB SHP   |                | 2                    | 2                         | 1   |                |                  | Fixed Value |
|             | SHP FO    |                | 3                    | 3                         | 1   |                |                  | Fixed Value |
|             | PRE OVER  |                | 0                    | 0                         | 2   |                |                  | Fixed Value |
|             | NR LVL    |                | 2                    | 2                         | 0   |                |                  | Fixed Value |
|             | CEC LVL   |                | 2                    | 2                         | 2   |                |                  | Fixed Value |
|             | DMIC PIC  | 2              |                      |                           |     |                |                  | Fixed Value |
| DCOM/       | VENH      | 2              |                      |                           |     |                |                  | Fixed Value |
| CHROMA/     | PAL DVD   | Non Adjustable |                      |                           |     |                |                  | Fixed Value |
|             | Y-OUT LVL | 15             |                      |                           |     |                |                  |             |
|             | C-OUT LVL | 29             |                      |                           |     |                |                  |             |
|             | Y-DL      | *              |                      |                           |     |                |                  | Fixed Value |
|             | S B-Y ADJ | 0              |                      |                           |     |                |                  | Fixed Value |
|             | S R-Y ADJ | 3              |                      |                           |     |                |                  | Fixed Value |
|             | S-INHBT   | 0              |                      |                           |     |                |                  | Fixed Value |
|             | S-ID      | 0              |                      |                           |     |                |                  | Fixed Value |
|             | S GP      | 0              |                      |                           |     |                |                  | Fixed Value |
|             | S V-ID    | 0              |                      |                           |     |                |                  | Fixed Value |
|             | BELL f0   | 0              |                      |                           |     |                |                  | Fixed Value |
|             | BELL/HPF  | 0              |                      |                           |     |                |                  | Fixed Value |
|             | SHP GAIN  |                | 12                   | 12                        | 12  |                |                  | Fixed Value |
|             | SHIP EQ   |                | 0                    | 0                         | 0   |                |                  | Fixed Value |
|             | SHIP F0   |                | 2                    | 2                         | 2   |                |                  | Fixed Value |

\* : It differs in accordance with the input signal.

Note : There are nonadjustable items in accordance with the input signal.

| Device Menu | Item Name    | Memory Name    |     |                       |                              |     |                |                  | Remarks |
|-------------|--------------|----------------|-----|-----------------------|------------------------------|-----|----------------|------------------|---------|
|             |              | Set<br>Memory  |     | Chroma Memory         |                              |     | Reso<br>Memory | Status<br>Memory |         |
|             |              |                |     | NT358, NT443<br>B&W60 | PAL, PALM/N<br>SECAM, B&W 50 | YUV |                |                  |         |
|             | VPL-CS2      | VPL-CX1        |     |                       |                              |     |                |                  |         |
| P. DRV/     | VCOM G       | 143/143 *      |     |                       |                              |     |                |                  |         |
|             | VCOM R       | 182/182 *      |     |                       |                              |     |                |                  |         |
|             | VCOM B       | 187/187 *      |     |                       |                              |     |                |                  |         |
|             | SIG CEN      | 120            | 160 |                       |                              |     |                | Fixed Value      |         |
|             | SID LVL      | 91             | 86  |                       |                              |     |                |                  |         |
|             | PRG LVL      | 125            | 128 |                       |                              |     |                |                  |         |
|             | INSTALLATION | Non Adjustable |     |                       |                              |     |                |                  |         |
| SH/         | SH 1         | 4              | 11  |                       |                              |     |                |                  |         |
|             | SH 2         | 88             | 90  |                       |                              |     |                |                  |         |
| V AMP/      | CONT         | 105            | 140 |                       |                              |     |                |                  |         |
|             | SUB CONT R   | 128            |     |                       |                              |     |                | Fixed Value      |         |
|             | SUB CONT G   | 128            |     |                       |                              |     |                |                  |         |
|             | SUG CONT B   | 128            |     |                       |                              |     |                |                  |         |
|             | BRT 1        | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | BRT 2        | 174            | 137 |                       |                              |     |                | Fixed Value      |         |
| EP/         | VNRSH R      | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | VNRSH G      | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | VNRSH B      | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | VNRSH R      | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | VNRSH G      | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | VNRSH B      | Non Adjustable |     |                       |                              |     |                |                  |         |
| TG/         | DXOUT R      | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | DXOUT G      | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | DXOUT B      | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | ENB R        | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | ENB G        | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | ENB B        | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | ENB WIDTH    | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | YOUT         | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | DYOUT POS    | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | SH WIDTH     | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | CLP1 POS     | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | CLP1 WIDTH   | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | CLP2 POS     | Non Adjustable |     |                       |                              |     |                |                  |         |
|             | CLP2 WIDTH   | Non Adjustable |     |                       |                              |     |                |                  |         |

\* : It differs in accordance with the INSTALLATION setting (Floor/ceiling).

Note : There are nonadjustable items in accordance with the input signal.



| Device Menu | Item Name      | Memory Name    |                       |                              |     |                |                  | Remarks     |
|-------------|----------------|----------------|-----------------------|------------------------------|-----|----------------|------------------|-------------|
|             |                | Set<br>Memory  | Chroma Memory         |                              |     | Reso<br>Memory | Status<br>Memory |             |
|             |                |                | NT358, NT443<br>B&W60 | PAL, PALM/N<br>SECAM, B&W 50 | YUV |                |                  |             |
| TG/         | NRG POS        | Non Adjustable |                       |                              |     |                |                  |             |
|             | NRG WIDTH      | Non Adjustable |                       |                              |     |                |                  |             |
|             | MSK H POS      | Non Adjustable |                       |                              |     |                |                  |             |
|             | MSK H WIDTH    | Non Adjustable |                       |                              |     |                |                  |             |
|             | MSK V POS      | Non Adjustable |                       |                              |     |                |                  |             |
|             | MSK V WIDTH    | Non Adjustable |                       |                              |     |                |                  |             |
| SC/         | FREEZE         | 0 (Non memory) |                       |                              |     |                |                  |             |
|             | HST            | 0              |                       |                              |     |                |                  |             |
|             | UNSYNCHRO IFV  |                |                       |                              |     |                | 0 (*1)           |             |
|             | SHOGA          | 0              |                       |                              |     |                |                  | Fixed Value |
|             | GAMMA ON       | 1 (Non memory) |                       |                              |     |                |                  |             |
|             | VINIT EVEN     |                |                       |                              |     | *2             |                  | Fixed Value |
|             | VINIT ODD      |                |                       |                              |     | *2             |                  | Fixed Value |
|             | HT GAIN        | 32             |                       |                              |     |                |                  |             |
|             | HT BIAS        | 0              |                       |                              |     |                |                  |             |
|             | ZOOM AREA GAIN | 32             |                       |                              |     |                |                  |             |
|             | EDMOD          |                |                       |                              |     | *2             |                  | Fixed Value |
|             | EDSEED         | 0              |                       |                              |     |                |                  |             |
|             | IIR            |                |                       |                              |     | *2             |                  |             |
|             | EGCRLL         |                |                       |                              |     | *2             |                  |             |
|             | EGCRUL         |                |                       |                              |     | *2             |                  |             |
|             | EGEHCOE        |                |                       |                              |     | *2             |                  |             |
| APA/        | APA SH LVL     | 16             |                       |                              |     |                |                  | Fixed Value |
|             | SHIFT SH LVL   | 51             |                       |                              |     |                |                  | Fixed Value |
| PLL/        | VCO            |                |                       |                              |     |                | 0 (*1)           | Fixed Value |
|             | CP             |                |                       |                              |     |                | *1               | Fixed Value |
| OTHER/      | TEMP LAMP      | Non Adjustable |                       |                              |     |                |                  | Fixed Value |
|             | TEMP PANEL     | Non Adjustable |                       |                              |     |                |                  | Fixed Value |
|             | ZOOM           | 0 (Non memory) |                       |                              |     |                |                  |             |
|             | ZOOM H SHIFT   | 1 (Non memory) |                       |                              |     |                |                  |             |
|             | ZOOM V SHIFT   | 2 (Non memory) |                       |                              |     |                |                  |             |
|             | UNIFORMITY     | 1 (Non memory) |                       |                              |     |                |                  |             |

\*1 : “DOT PHASE, SIZE H, SHIFT H/V, SCAN CONV and ASPECT” in the “INPUT SETTING” menu have an initial value respectively in accordance with the input signal (PRESET MEMORY No.).

\*2 : It differs in accordance with the resolution of the input signal.

Note : There are nonadjustable items in accordance with the input signal.

### 3-4. Service Kowhow

#### 3-4-1. After Replacing the Prism Block

1. Perform Section “3-1-2, item 2) Polarizing Plate Adjustment.”
2. Perform Section “3-2. V-COM Adjustment.”
3. Perform Section “3-5. White Balance Adjustment on Servicing.”

#### 3-4-2. After Replacing the Board

- Refer to the cross table below.
- There are no need to perform the adjustment when the board other than the BA board or C board had been replaced.

##### 1) When Replacing the BA Board

###### When the data before replacement can be read properly

1. Make a not of the data before replacement. After replacement, write the data into the new board with service mode.
2. If the white balance is extremely deteriorated, perform the white balance adjustment (Refer to Section 3-5.).

###### When the data before replacement cannot be read

1. Perform Section “3-2. V-COM Adjustment.”
2. Perform Section “3-5. White Balance Adjustment on Servicing.”

##### 2) When Replacing the C Board

1. Perform Section “3-2. V-COM Adjustment.”
2. Perform Section “3-5. White Balance Adjustment on Servicing.”

##### 3) When Replacing the Other Board

There are no need to perform the adjustment.

Cross Table of Board Replacement

| Device Name  | Item Name  | Board Name |             |
|--------------|------------|------------|-------------|
|              |            | BA         | C           |
| P.DRV        | VCOM (R)   | *          | ○           |
|              | VCOM (G)   | *          | ○           |
|              | VCOM (B)   | *          | ○           |
|              | CONT       | *          | 95, 100 IRE |
|              | SUB CONT R | *          | 95,100 IRE  |
|              | SUB CONT G | *          | 128 Fixed   |
|              | SUB CONT B | *          | 95,100 IRE  |
|              | BRT        | *          | 2.8 V       |
| W/B ADJUST   |            |            |             |
| INPUT A-HIGH | GAIN R     | *          | No          |
|              | GAIN G     | *          | No          |
|              | GAIN B     | *          | No          |
|              | BIAS R     | *          | No          |
|              | BIAS G     | *          | No          |
|              | BIAS B     | *          | No          |
| INPUT A-LOW  | GAIN R     | *          | ○           |
|              | GAIN G     | *          | ○           |
|              | GAIN B     | *          | ○           |
|              | BIAS R     | *          | ○           |
|              | BIAS G     | *          | ○           |
|              | BIAS B     | *          | ○           |
| VIDEO-HIGH   | GAIN R     | *          | No          |
|              | GAIN G     | *          | No          |
|              | GAIN B     | *          | No          |
|              | BIAS R     | *          | No          |
|              | BIAS G     | *          | No          |
|              | BIAS B     | *          | No          |
| VIDEO-LOW    | GAIN R     | *          | ○           |
|              | GAIN G     | *          | ○           |
|              | GAIN B     | *          | ○           |
|              | BIAS R     | *          | ○           |
|              | BIAS G     | *          | ○           |
|              | BIAS B     | *          | ○           |

\* : When down the data befor replacement, and then write in the data after the board replacement.

○ : Need adjustment

Value : See description.

### 3-5. White Balance Adjustment on Servicing

#### 3-5-1. Signal Level Adjustment

1. Input the 10 STEP signal to INPUT-A.
2. Warm up the unit at least 10 minutes. Enter the V-AMP/BRT adjustment mode from the Service mode as follows :  
Service Mode → MENU → DEV. ADJ → P. DRV → VAMP/BRT.
3. Measure TP813, TP817, and TP821 on the C board by oscilloscope. Adjust V AMP/BRT so that the minimum value in all black level is 2.8 V.
4. Input the 95 IRE and 100 IRE STEP signals.
5. Set the unit in G-only mode.
6. Enter the P.DRV on the MENU screen by the DEV. ADJ.
7. Discriminate the 95 IRE and 100 IRE by the V-AMP/CONT controls of the P.DRV.
8. Set the unit in R-only mode.
9. Discriminate the 95 IRE and 100 IRE by the V-AMP/SUB CONT R controls of the P.DRV.
10. Set the unit in B-only mode.
11. Discriminate the 95 IRE and 100 IRE by the V-AMP/SUB CONT B controls of the P.DRV.

#### 3-5-2. White Balance Adjustment

##### 1) HIGH Mode of INPUT-A

Input the 10 STEP signal to INPUT-A, and observe the chromaticity of each luminance.

When varying the chromaticity of each luminance, perform the following adjustments.

1. Input the 100 IRE FLAT FIELD signal to INPUT-A.
2. Measure the chromaticity (x, y).
3. Input the 50 IRE FLAT FIELD signal to INPUT-A.
4. Adjust the chromaticity (x, y) to the values measured in step 2 by the VAMP/SUB CONT R and B of the P. DRV.

##### 2) LOW Mode of INPUT-A

1. Input the 80 IRE FLAT FIELD signal to INPUT-A.
2. Set the GAIN G to 60 with the LOW mode of the W/B.
3. Measure the chromaticity (x, y).
4. Input the 25 IRE FLAT FIELD signal to INPUT-A.
5. Adjust the chromaticity (x, y) to the values measured in step 3 by the BIAS G and B of the LOW mode of the W/B.
6. Repeat above steps 1 to 5 until the chromaticity become the following values.  
 $x \pm 0.002$ ,  $y \pm 0.003$  (The x and y are the values measured in step 3.)

##### 3) HIGH Mode of VIDEO

Switch the input to COMPONENT from INPUT-A by the SET SETTING of the Menu screen.

Input the 15k COMPONENT 10 STEP signal to INPUT-A, and observe the chromaticity of each luminance.

When varying the chromaticity of each luminance, perform the following adjustments.

1. Input the 100 IRE FLAT FIELD signal to INPUT-A.
2. Measure the chromaticity (x, y).
3. Input the 50 IRE FLAT FIELD signal to INPUT-A.
4. Adjust the chromaticity (x, y) to the values measured in step 2 by the VAMP/SUB CONT R and B of the P. DRV.

##### 4) LOW Mode of VIDEO

1. Input the 80 IRE 15k COMPONENT FLAT FIELD signal to INPUT-A.
2. Set the GAIN G to 60 with the LOW mode of the W/B.
3. Measure the chromaticity (x, y).
4. Input the 25 IRE FLAT FIELD signal to INPUT-A.
5. Adjust the chromaticity (x, y) to the values measured in step 3 by the BIAS G and B of the LOW mode of the W/B.
6. Repeat above steps 1 to 5 until the chromaticity become the following values.  
 $x \pm 0.002$ ,  $y \pm 0.003$  (The x and y are the values measured in step 3.)

3-6. Memory

Memory structure of VPL-CS2/CX1 series is based on the VPL-CS1 and it is composed of the following eight memory blocks.

- 1. Set memory
- 2. Status memory
- 3. Channel memory
- 4. Chroma memory
- 5. W/B memory
- 6. Reso memory
- 7. Gamma memory
- 8. Uniformity memory

CPU internal ROM : 256 kbyte Flash Memory

CPU internal ROM : 16 kbyte

External NVM memory : 8 kbyte EEPROM  
(BA mounted IC202)

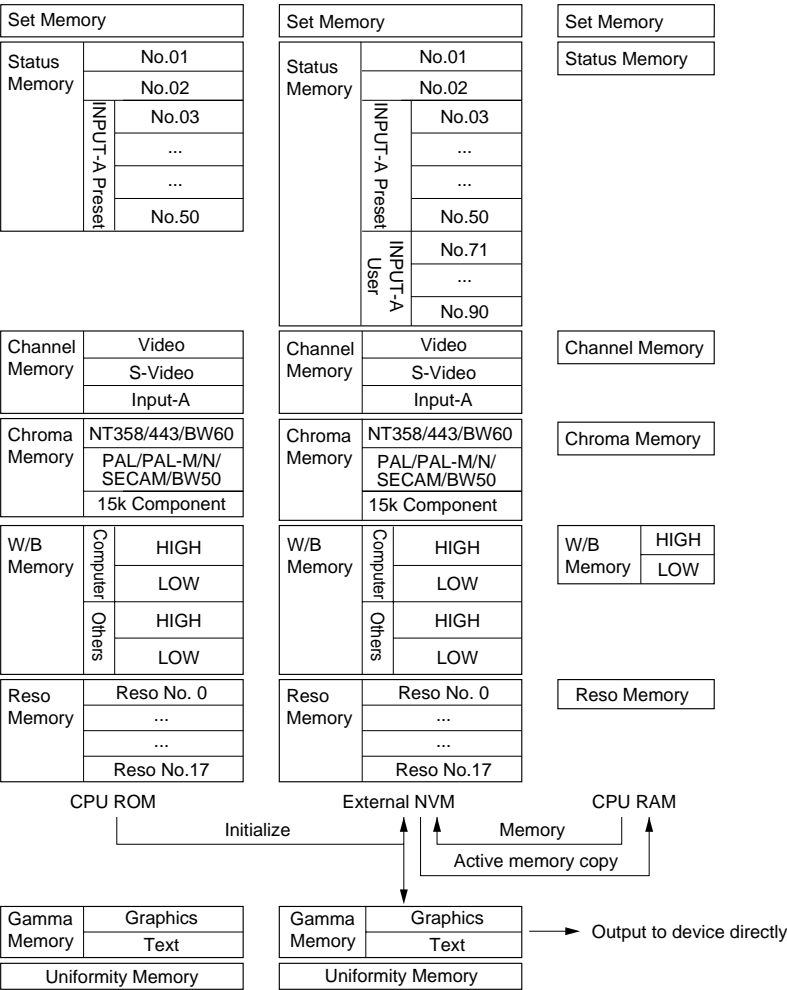
When the power plug is connected to the power line (Standby status), all data inside the internal ROM are

written into the NVM (Nonvolatile Memory). When the power is turned on, required data for the current picture, such as status memory data, etc., are selected, and they are written into the internal RAM. At this time, the gamma memory data and uniformity memory data which newly provided in this series are not writing into the internal RAM but they will be transferred to the register inside the device directly.

When adjustment is carried out, adjustment data are written into the NVM automatically (items on the user mode) or by the trigger of memory operation (items on the service mode and special service mode).

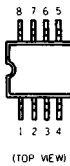
But, each values of gamma memory and uniformity memory does not adjust from the OSD but can only adjust by the RS232C communications.

Adjustable items (W/B and Device Adjust) of the service mode and special service are memorized into the NVM by the memory operation. At the same time, the factory preset (adjusted) data are all eliminated from the memory.

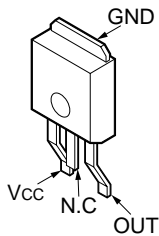


## Section 4 Semiconductors

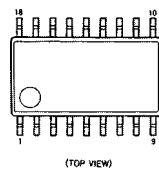
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IRMF-A0T-QTP  
LMV358MMX  
LT1374IS8#TR  
LT1376IS#TR  
M24C64  
MC100ELT20DR2  
NJM2073M(TE2)  
TA75W393FU  
TL431BCDR2  
UPD16875G



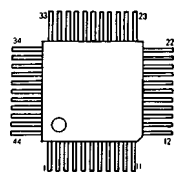
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BA12FP-E2



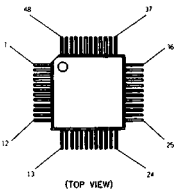
CXA1846BN



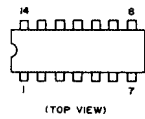
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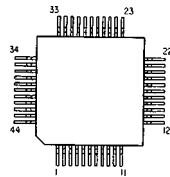
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CXD2064Q-T6



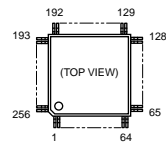
FA5332M-TE1



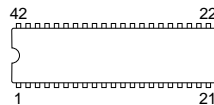
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UPD72012GB



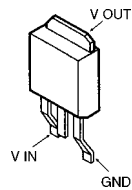
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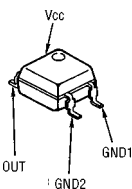
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PQ05SZ1U



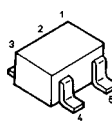
RS-140-T



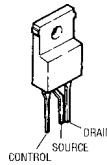
TA78M09F(TE16L)



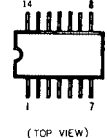
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TC7SH08FU-TE85R  
TC7SZ04FU



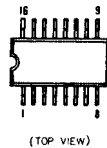
TOP222Y-BB  
TOP223Y-BB



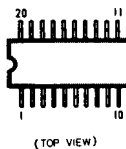
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74VHC14MTCX  
TC74LCX74FT(EL)  
TC74VHCT04AFT(EL)  
TC74VHC08FT(EL)



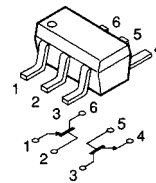
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CXA1875AM-T4  
MAX4066CEE-TE2



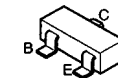
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74VHC541MTCX  
MB88346BPFV-EF  
MB90098APF  
MK1714-01RT



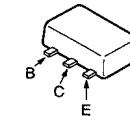
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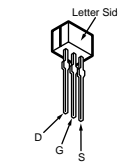
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2SA1213Y-TE12L  
2SA1462  
2SA1611T1-M5M6  
2SC2712-YG-TE85L  
DTA144EKA-T146  
DTC114EUA-T106  
DTC144EKA-T146



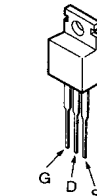
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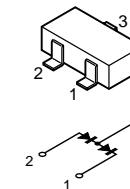
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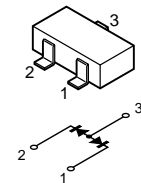
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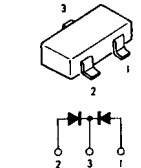
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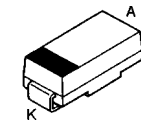
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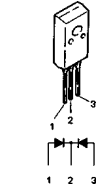
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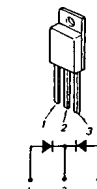
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D1FS4A-TA



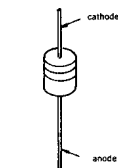
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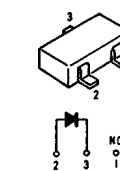
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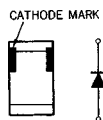
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RD20ES-T1B2



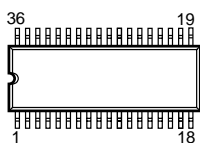
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RD8.2M-T1B1



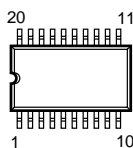
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SEC1901C  
SEC2422C



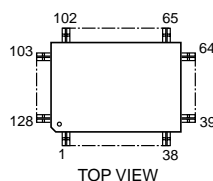
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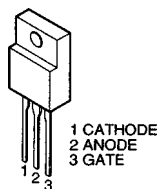
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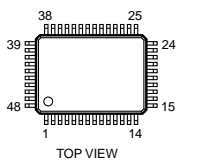
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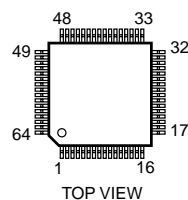
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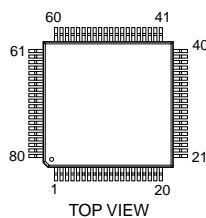
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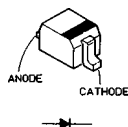
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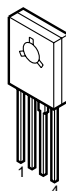
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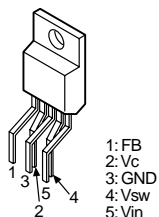
1SS355TE-17  
D2FS6-TA  
DTZ-TT11-5.1  
RB501V-40TE-17  
RD5.6SB-T1  
RD9.1SB2-T1  
UDZ-TE-17-3.9B



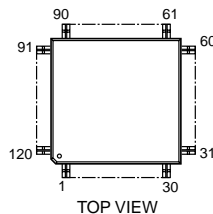
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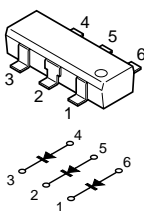
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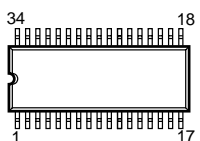
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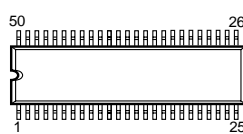
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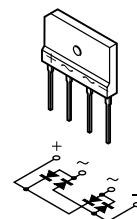
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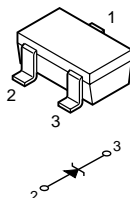
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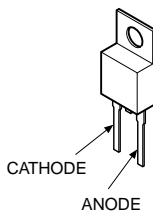
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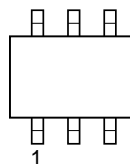
LM4041D1M3-1, 2(T&R)



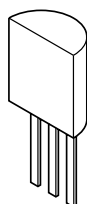
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FSF10A60



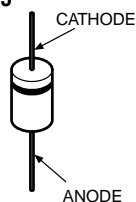
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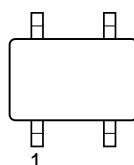
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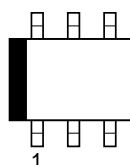
P6K300AG23  
P6KE200AG23  
P6KE350AG23  
RGP10G  
RGP10J



S-80842ANNP



TK11900MTL



## Section 5

### Exploded Views

#### NOTE :

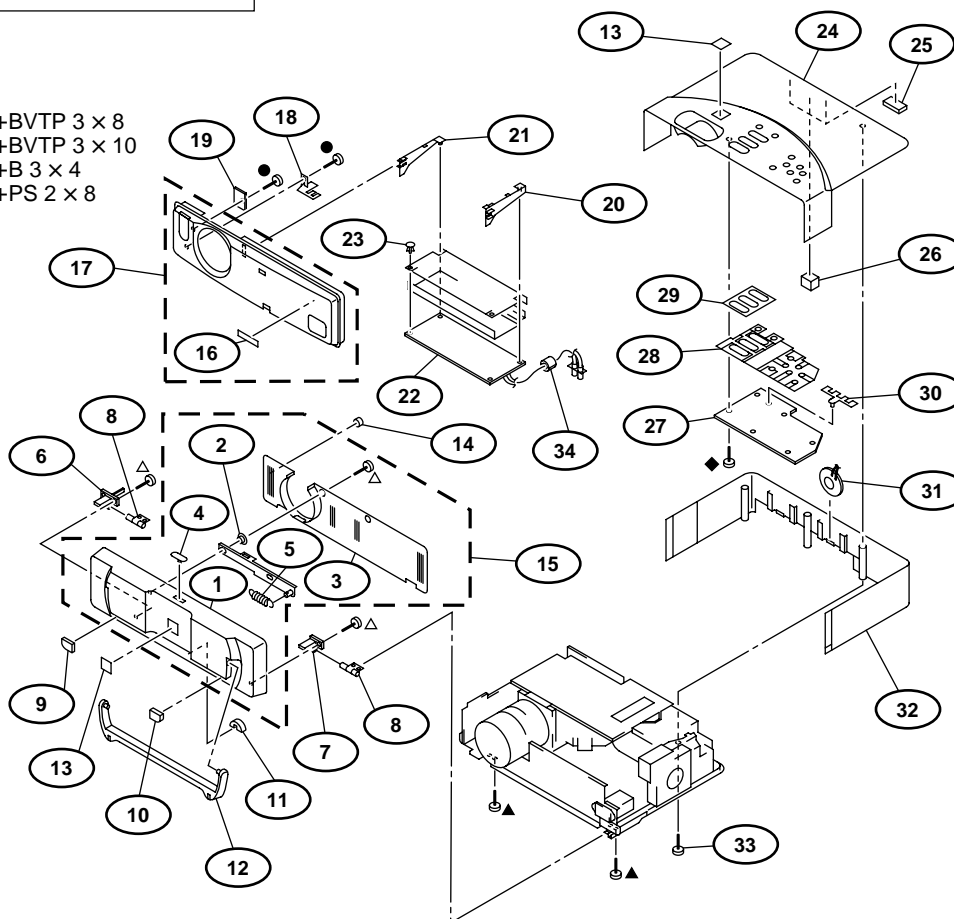
The components identified marked  $\triangle$  are critical for safety.  
Replace only with the part number specified.

Les composants identifiés par la marque  $\triangle$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.

#### 5-1. Cover

- : 7-685-646-21 +BVTP 3 × 8  
 $\triangle$ : 7-685-647-11 +BVTP 3 × 10  
 $\blacklozenge$ : 7-682-545-09 +B 3 × 4  
 $\blacktriangle$ : 7-628-253-30 +PS 2 × 8



| Ref.No. | Part No.       | Description            | Remark    | Ref.No. | Part No.       | Description            | Remark |
|---------|----------------|------------------------|-----------|---------|----------------|------------------------|--------|
| 1       | * 4-074-275-04 | COVER,FRONT            |           | 18      | * 4-074-442-02 | CATCHER (FC)           |        |
| 2       | * 4-075-585-01 | GUIDE                  |           | 19      | * A-1390-984-A | NF MOUNT               |        |
| 3       | * 4-074-627-01 | COVER,BACK             |           | 20      | * 4-076-751-01 | HOLDER (R),BS          |        |
| 4       | 4-074-251-02   | SWITCH,LOCK            |           | 21      | * 4-076-752-01 | HOLDER (L),BS          |        |
| 5       | * 4-074-434-01 | SPRING,EXTENSION       |           | 22      | A-1501-658-A   | SUPPLY ASSY,LAMP POWER |        |
| 6       | * 4-074-255-01 | HOLDER (L),FRONT COVER |           | 23      | 4-374-303-01   | RIVET, NYLON           |        |
| 7       | * 4-074-254-01 | HOLDER (R),FRONTCOVER  |           | 24      | * 4-079-502-01 | COVER (AL),TOP         |        |
| 8       | * 4-074-245-01 | HINGE (F)              |           | 25      | * 4-075-165-01 | CUSHION (SP)           |        |
| 9       | * 4-075-432-01 | CUSHION,HANDLE         |           | 26      | 4-080-450-01   | SPACER (C)             |        |
| 10      | * 4-075-432-11 | CUSHION,HANDLE         |           | 27      | * A-1375-195-A | H COMPL                |        |
| 11      | 4-080-008-01   | CUSHION (CV)           |           | 28      | * 4-074-248-01 | KEY TOP                |        |
| 12      | * X-4037-487-2 | HANDLE ASSY            |           | 29      | * 4-075-166-01 | CUSHION,BUTTON         |        |
| 13      | * 4-079-876-01 | EMBLEM (CS2)           | [VPL-CS2] | 30      | * 4-074-244-01 | GUIDE (LED),LIGHT      |        |
|         | 4-080-297-01   | EMBLEM (CX1)           | [VPL-CX1] | 31      | 1-529-544-11   | SPEAKER (3.6CM)        |        |
| 14      | * 4-075-442-01 | CUSHION (FC)           |           | 32      | * 4-074-273-02 | COVER,SIDE             |        |
| 15      | * X-4037-720-2 | COVER ASSY,FRONT       | 1-5       | 33      | 4-074-264-01   | SHAFT                  |        |
| 16      | 3-704-176-51   | EMBLEM (NO.6),SONY     |           | 34      | 1-500-082-11   | CLAMP,SLEEVE FERRITE   |        |
| 17      | * X-4038-424-1 | PANEL ASSY,FRONT       | 16        |         |                |                        |        |

5-2. Chassis

- 7-682-547-04

+B 3 × 6
- 7-621-772-38

+B 2 × 6
- 7-685-646-21

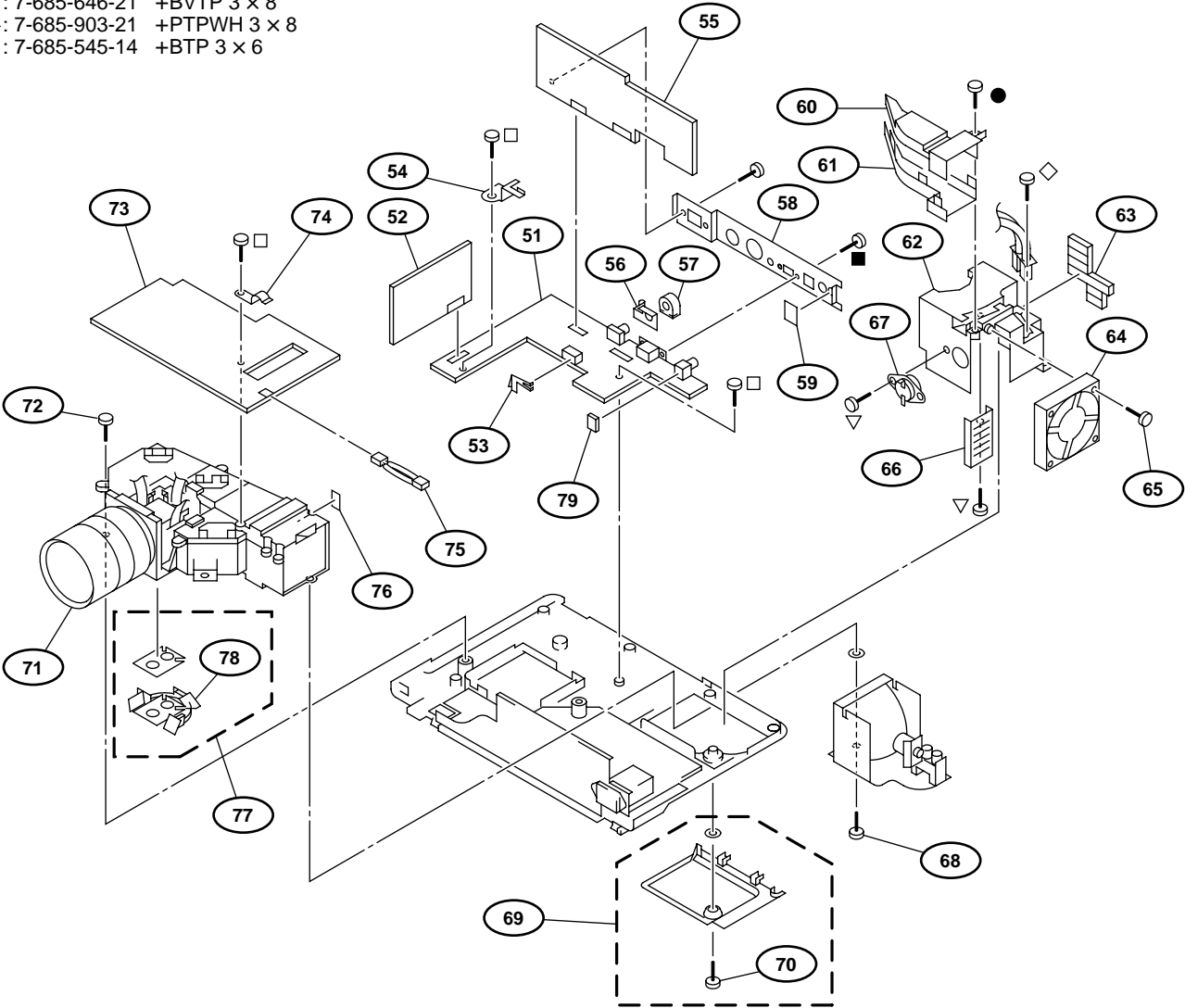
+BVTP 3 × 8
- ◇

7-685-903-21

+PTPWH 3 × 8
- ▽

7-685-545-14

+BTP 3 × 6

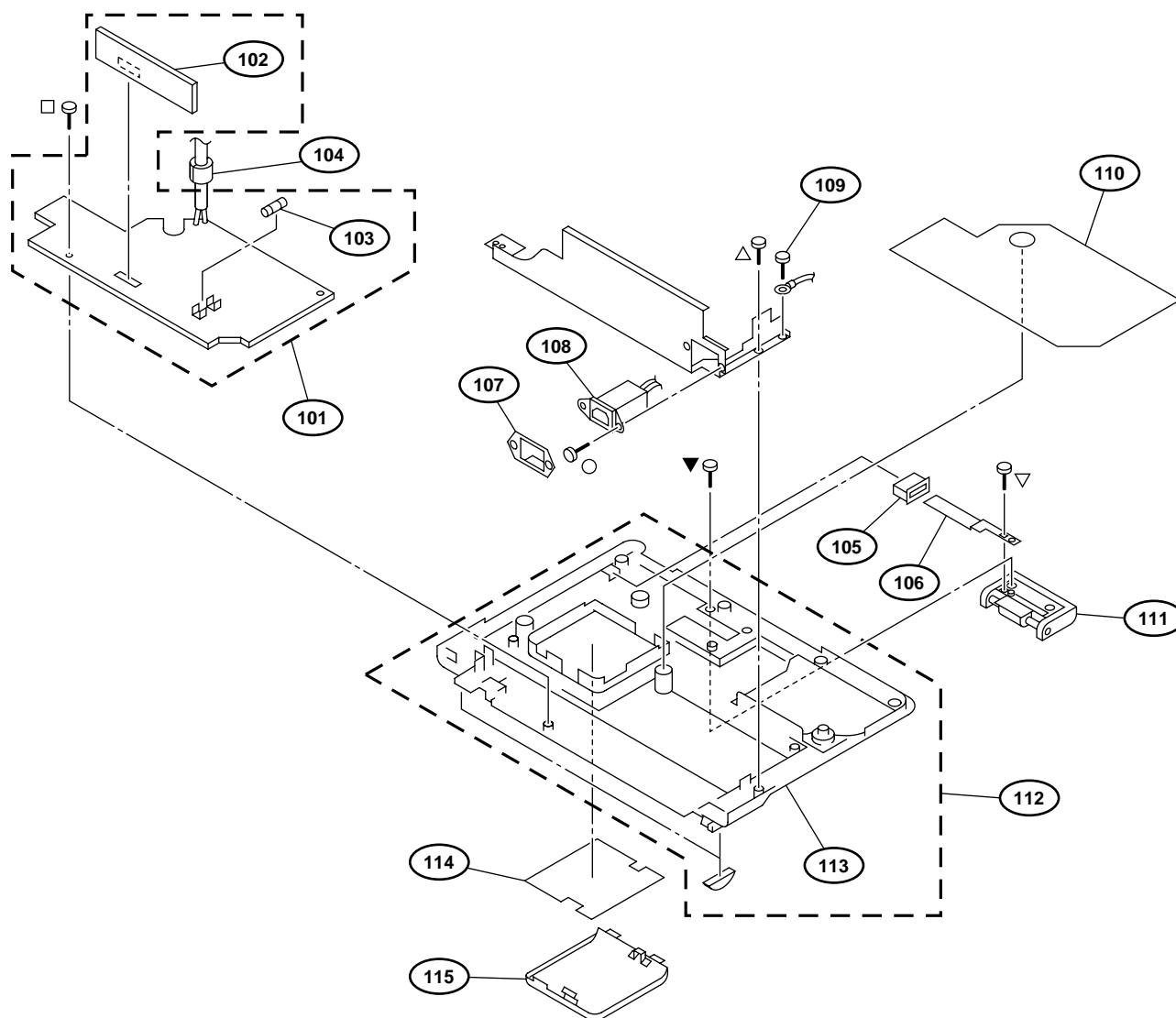


| Ref.No. | Part No.       | Description          | Remark    | Ref.No. | Part No.       | Description              | Remark    |
|---------|----------------|----------------------|-----------|---------|----------------|--------------------------|-----------|
| 51      | * A-1275-186-C | QA COMPL             |           | 66      | * 4-076-864-01 | LOUVER,LAMP HOUSE        |           |
| 52      | * A-1136-048-A | BA COMPL             |           | 67      | △ 1-576-490-11 | THERMOSTAT               |           |
| 53      | * 4-079-888-01 | LEVER (S2),SWITCH    |           | 68      | 4-066-202-01   | SCREW,M3                 |           |
| 54      | * 4-080-009-01 | SPRING (BL2),EARTH   |           | 69      | * X-4038-422-1 | DOOR ASSY,LAMP           | 70        |
| 55      | * A-1136-136-A | B COMPL              | [VPL-CS2] | 70      | 4-066-202-01   | SCREW,M3                 |           |
|         | * A-1136-148-A | B COMPL              | [VPL-CX1] |         |                |                          |           |
| 56      | * 4-074-982-01 | SPRING (VIDEO),EARTH |           | 71      | A-1485-065-A   | OPTICS BLOCK ASSY        | [VPL-CS2] |
| 57      | * 4-074-246-01 | SLEEVE,VIDEO         |           |         | A-1485-068-A   | OPTICS BLOCK ASSY        | [VPL-CX1] |
| 58      | * 4-074-260-03 | PLATE (QA)           |           | 72      | 4-066-309-01   | SCREW,MACHINE,(+) P M4X8 |           |
| 59      | * 4-074-263-01 | FILTER,REAR          |           | 73      | * A-1335-133-A | C COMPL                  | [VPL-CS2] |
| 60      | * 4-074-227-02 | DUCT (T)             |           |         | * A-1335-134-A | C COMPL                  | [VPL-CX1] |
| 61      | * 4-074-226-01 | DUCT (B)             |           | 74      | * 4-074-983-02 | SPRING (CT),EARTH        |           |
| 62      | * 4-079-892-01 | HOUSE,LAMP           |           | 75      | 1-900-222-47   | CONNECTOR ASSY, FUSE 2P  |           |
| 63      | * 4-074-727-01 | LOUVER (A)           |           | 76      | * 4-075-424-02 | SPACER (SRF)             |           |
| 64      | 1-763-172-11   | FAN,DC               |           | 77      | * X-4038-325-1 | NOZZLE (CS2) ASSY        | 78        |
| 65      | * 4-074-239-01 | SCREW, FAN           |           | 78      | * 4-079-364-01 | NOZZLE (CS2)             |           |
|         |                |                      |           | 79      | 4-080-451-01   | SPACER (B)               |           |



### 5-3. Base

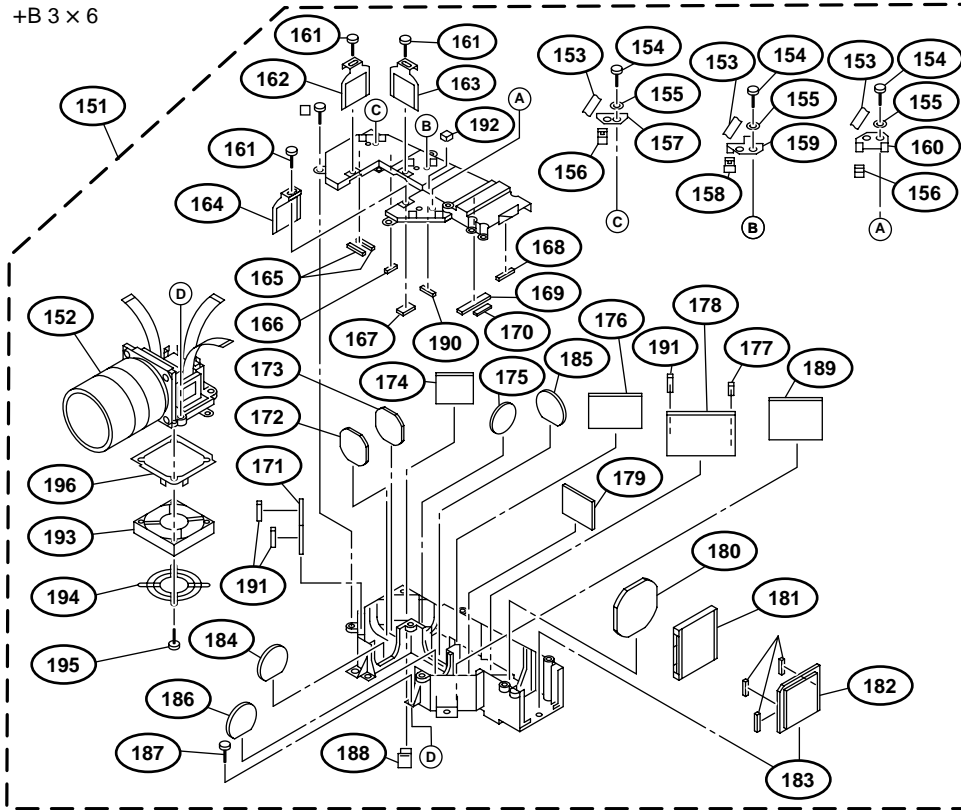
- △: 7-685-647-11 +BVTP 3 × 10  
 ○: 7-682-247-09 +K 3 × 6  
 □: 7-682-547-04 +B 3 × 6  
 ▼: 7-685-246-29 +KTP 3 × 8  
 ▽: 7-685-545-14 +BTP 3 × 6



| Ref.No. | Part No.       | Description                    | Remark  | Ref.No. | Part No.       | Description               | Remark |
|---------|----------------|--------------------------------|---------|---------|----------------|---------------------------|--------|
| 101     | * A-1316-546-A | GA COMPL                       | 102-103 | 109     | 4-066-309-01   | SCREW,MACHINE, (+) P M4X8 |        |
| 102     | * A-1311-887-A | GB MOUNT                       |         | 110     | * 4-079-891-01 | SHEET (GA)                |        |
| 103     | △ 1-576-233-11 | H.B.C FUSE (6.3A 250V)         |         | 111     | 4-079-890-01   | ADJUSTER (S2)             |        |
| 104     | 1-500-082-11   | CLAMP,SLEEVE FERRITE           |         | 112     | * X-4038-423-1 | BASE ASSY                 | 113    |
| 105     | * 4-079-887-01 | BUTTON,ADJUSTER                |         | 113     | * 4-079-501-01 | BASE                      |        |
| 106     | * 4-079-886-01 | LEVER,SLIDE                    |         | 114     | * 4-074-717-01 | FILTER                    |        |
| 107     | * 4-074-660-01 | PLATE (AC)                     |         | 115     | * 4-074-441-11 | COVER,FILTER              |        |
| 108     | △ 1-251-382-12 | INLET,AC 3P(WITH NOISE FILTER) |         |         |                |                           |        |

## 5-4. Optics (1/2)

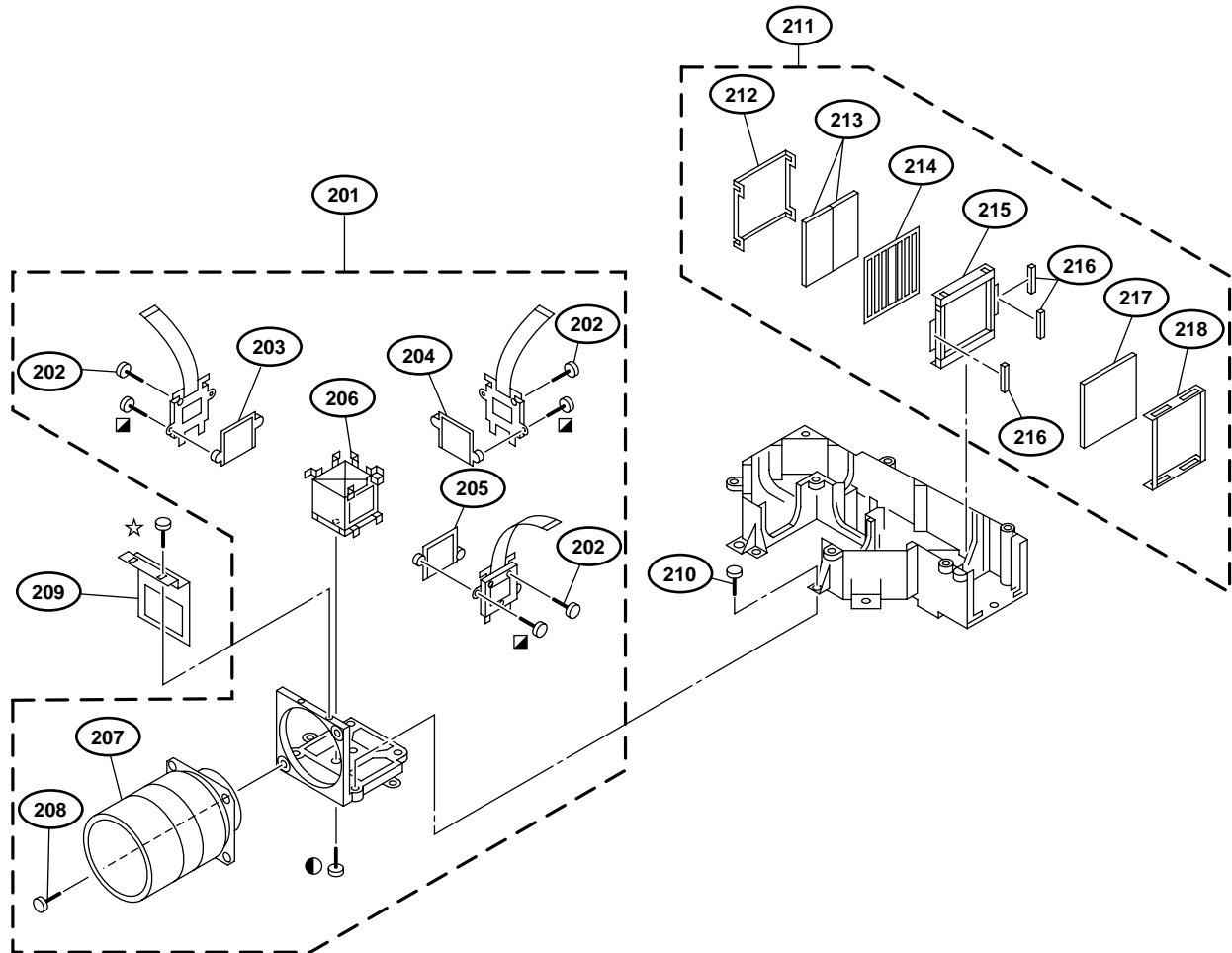
□: 7-682-547-04 +B 3 × 6



| Ref.No. | Part No.       | Description                   | Remark    | Ref.No. | Part No.       | Description                    | Remark    |
|---------|----------------|-------------------------------|-----------|---------|----------------|--------------------------------|-----------|
| 151     | A-1485-065-A   | OPTICS BLOCK ASSY             | [VPL-CS2] | 173     | * 4-074-409-01 | LENS (OPT),RELAY-2             |           |
|         | A-1485-068-A   | OPTICS BLOCK ASSY             | [VPL-CX1] | 174     | * 4-074-413-01 | MIRROR,R-CHANNEL -1(OPT)       |           |
|         |                |                               |           | 175     | * 4-074-408-01 | LENS (OPT),RELAY-1             |           |
| 152     | A-1485-066-A   | PRISM BLOCK ASSY              | [VPL-CS2] | 176     | 4-079-878-01   | DICHROICMIRROR,G-REFRECT (OPT) |           |
|         | A-1485-069-A   | PRISM BLOCK ASSY              | [VPL-CX1] | 177     | * 4-074-427-01 | CUSHION (B-DM)                 |           |
| 153     | 4-074-425-01   | TAPE (A), SEAL                |           | 178     | 4-079-877-01   | DICHROICMIRROR,B-REFRECT (OPT) |           |
| 154     | 4-074-474-01   | +BSW M3X8                     |           | 179     | * 4-074-411-01 | FILTER (OPT),UV CUT            |           |
| 155     | 4-066-174-01   | STOPPER (OPT),ROTATION        |           | 180     | * 4-074-414-01 | LENS,MAIN CONDENSER (OPT)      |           |
| 156     | * 4-074-405-01 | FASTENER (RB)                 |           | 181     | A-1485-067-A   | P/S BLOCK ASSY                 | [VPL-CS2] |
| 157     | * 4-074-454-01 | ADJUSTER,R-MIRROR             |           |         | A-1485-070-A   | P/S BLOCK ASSY                 | [VPL-CX1] |
| 158     | * 4-074-476-01 | FASTNER (G)                   |           | 182     | * 4-074-426-01 | CUSHION (FLY EYE)              |           |
| 159     | * 4-074-466-01 | ADJUSTER,G-MIRROR             |           | 183     | * 4-074-449-01 | FLY EYE LENS-1                 |           |
| 160     | * 4-074-455-01 | ADJUSTER,B-MIRROR             |           | 184     | * 4-074-416-01 | LENS,CONDENSER-R-CH (OPT)      |           |
| 161     | 3-696-947-11   | SCREW (+B2.5)                 |           | 185     | * 4-074-418-01 | LENS,CONDENSER-G-CH (OPT)      |           |
| 162     | * X-4038-416-1 | ASSY,IN-POLARIZER (R)         | [VPL-CS2] |         | 4-080-307-01   | LENS,CONDENSER-CH (OPT) TYPE2  | [VPL-CX1] |
|         | X-4038-494-1   | IN-POLARIZER (R) ASSY (TYPE2) | [VPL-CX1] |         |                |                                |           |
| 163     | * X-4038-418-1 | ASSY,IN-POLARIZER (G)         | [VPL-CS2] | 186     | * 4-074-417-01 | LENS,CONDENSER-B-CH (OPT)      | [VPL-CS2] |
|         | X-4038-495-1   | IN-POLARIZER (G) ASSY (TYPE2) | [VPL-CX1] |         | 4-080-307-01   | LENS,CONDENSER-CH (OPT) TYPE2  | [VPL-CX1] |
| 164     | * X-4038-421-1 | ASSY,IN-POLARIZER (B)         | [VPL-CS2] | 187     | 4-066-309-01   | SCREW,MACHINE,(+) P M4X8       |           |
|         | X-4038-499-1   | IN-POLARIZER (B) ASSY (TYPE2) | [VPL-CX1] | 188     | 4-066-172-01   | FASTENER (OPT),MIRROR          |           |
| 165     | * 4-074-429-01 | STOPPER,RELAY LENS-2          |           | 189     | * 4-074-415-11 | MIRROR,B-CHANNEL (OPT)         |           |
| 166     | * 4-074-433-01 | STOPPER,RELAY LENS-1          |           | 190     | * 4-074-429-11 | STOPPER,RELAY LENS-2           |           |
| 167     | * 4-074-432-01 | STOPPER (GB),CH CONDENSER     |           | 191     | * 4-074-426-11 | CUSHION (FLY EYE)              |           |
| 168     | * 4-074-475-01 | STOPPER,FLY EYE               |           | 192     | * 4-075-039-01 | SPACER (C)(OPT)                |           |
| 169     | * 4-074-430-01 | STOPPER,MAIN CONDENSER        |           | 193     | 1-763-172-21   | FAN,DC                         |           |
| 170     | * 4-074-428-01 | STOPPER,P/S                   |           | 194     | 4-067-472-01   | GUARD,FINGER                   |           |
| 171     | * 4-074-412-01 | MIRROR,R-CHANNEL-2(OPT)       |           | 195     | * 4-074-239-01 | SCREW,FAN                      |           |
| 172     | * 4-074-410-01 | LENS (OPT),RELAY-3            |           | 196     | * 4-080-010-01 | CUSHION (FAN)                  |           |

5-5. Optics (2/2)

▣: 7-685-103-19 +P 2 × 5  
●: 7-682-648-09 +PS 3 × 8  
☆: 7-627-554-38 +P 2 × 1.8



| Ref.No. | Part No.       | Description            | Remark            | Ref.No. | Part No.       | Description               | Remark    |
|---------|----------------|------------------------|-------------------|---------|----------------|---------------------------|-----------|
| 201     | A-1485-066-A   | PRISM BLOCK ASSY       | [VPL-CS2]         | 207     | A-1501-632-A   | LENS,PROJECTION           |           |
|         | A-1485-069-A   | PRISM BLOCK ASSY       | [VPL-CX1]         | 208     | 4-066-309-01   | SCREW,MACHINE, (+) P M4X8 |           |
|         |                |                        | 202-208           | 209     | * 4-074-701-01 | BRACKET,WINDOW            |           |
| 202     | 4-074-473-01   | +K M1.7X6              |                   | 210     | 4-066-309-01   | SCREW,MACHINE, (+) P M4X8 |           |
| 203     | * X-4038-417-1 | ASSY,OUT-POLARIZER (R) | [VPL-CS2]         | 211     | A-1485-067-A   | P/S BLOCK ASSY            | [VPL-CS2] |
|         | X-4038-496-1   | OUT-POLARIZER (R) ASSY | (TYPE2) [VPL-CX1] |         | A-1485-070-A   | P/S BLOCK ASSY            | [VPL-CX1] |
| 204     | * X-4038-419-1 | ASSY,OUT-POLARIZER (G) | [VPL-CS2]         |         |                |                           | 212-218   |
|         | X-4038-498-1   | OUT-POLARIZER (G) ASSY | (TYPE2) [VPL-CX1] | 212     | * 4-074-456-01 | SPRING,P/S                |           |
| 205     | * X-4038-420-1 | ASSY,OUT-POLARIZER (B) | [VPL-CS2]         | 213     | * 4-074-446-01 | CONVERTER,P/S (OPT)       |           |
|         | X-4038-497-1   | OUT-POLARIZER (B) ASSY | (TYPE2) [VPL-CX1] | 214     | * 4-074-477-01 | SLIT,P/S                  |           |
| 206     | A-148-470-5A   | PRISM ASSY,4P          | [VPL-CS2]         | 215     | * 4-074-471-04 | HOLDER,P/S                |           |
|         | X-4038-500-1   | PRISM ASSY,4P          | [VPL-CX1]         | 216     | * 4-074-426-11 | CUSHION (FLY EYE)         |           |
|         |                |                        |                   | 217     | * 4-074-448-01 | FLY EYE LENS-2            |           |
|         |                |                        |                   | 218     | * 4-074-457-01 | SPRING,FLY EYE            |           |



## Section 6

### Electrical Parts List

#### NOTE :

The components identified marked  $\triangle$  are critical for safety.  
Replace only with the part number specified.

Les composants identifiés par la marque  $\triangle$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked “ \* ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.

#### RESISTORS

- All resistors are in ohms.
- F: nonflammable
- METAL: Metal-film resistor
- METAL OXIDE: Metal oxide-film resistor
- CAPACITORS UF :  $\mu$ F. PF :  $\mu$  $\mu$ F
- COILS MMH : mH. UH :  $\mu$ H

| Ref.No. | Part No.       | Description            | Remark |       |  | Ref.No. | Part No.     | Description          | Remark |      |  |
|---------|----------------|------------------------|--------|-------|--|---------|--------------|----------------------|--------|------|--|
|         | * A-1390-984-A | NF MOUNT<br>*****      |        |       |  | C240    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
|         |                |                        |        |       |  | C241    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
|         | <CAPACITOR>    |                        |        |       |  | C242    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
|         |                |                        |        |       |  | C243    | 1-163-037-11 | CERAMIC CHIP 0.022UF | 10.00% | 50V  |  |
|         |                |                        |        |       |  | C244    | 1-163-009-11 | CERAMIC CHIP 0.001UF | 10.00% | 50V  |  |
| C071    | 1-113-985-11   | TANTAL CHIP 10UF       | 20.00% | 20V   |  | C245    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
|         |                |                        |        |       |  | C246    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
|         | <CONNECTOR>    |                        |        |       |  | C247    | 1-131-998-21 | ELECT CHIP 82UF      | 20%    | 6.3V |  |
| CN071   | * 1-580-056-21 | PIN,CONNECTOR (SMD) 3P |        |       |  | C274    | 1-104-823-11 | TANTAL CHIP 47UF     | 20.00% | 16V  |  |
|         |                |                        |        |       |  | C275    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
|         |                |                        |        |       |  | C276    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
|         | <IC>           |                        |        |       |  | C277    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
| IC071   | 8-749-012-17   | IC RS-140-T            |        |       |  | C278    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
|         |                |                        |        |       |  | C279    | 1-107-682-11 | CERAMIC CHIP 1UF     | 10.00% | 16V  |  |
|         |                |                        |        |       |  | C280    | 1-124-779-00 | ELECT CHIP 10UF      | 20.00% | 16V  |  |
|         |                |                        |        |       |  | C281    | 1-109-982-11 | CERAMIC CHIP 1UF     | 10.00% | 10V  |  |
|         | <RESISTOR>     |                        |        |       |  | C282    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
| R071    | 1-216-017-91   | RES-CHIP 47            | 5%     | 1/10W |  | C283    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
| R072    | 1-216-025-11   | RES-CHIP 100           | 5%     | 1/10W |  | C284    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
|         |                |                        |        |       |  | C285    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
|         |                |                        |        |       |  | C286    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
|         |                |                        |        |       |  | C287    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
|         |                |                        |        |       |  | C291    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
|         |                |                        |        |       |  | C292    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
|         |                |                        |        |       |  | C293    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
|         |                |                        |        |       |  | C294    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
|         |                |                        |        |       |  | C295    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
| C201    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C296    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
| C202    | 1-126-204-11   | ELECT CHIP 47UF        | 20.00% | 16V   |  | C297    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
| C221    | 1-117-681-11   | ELECT CHIP 100UF       | 20.00% | 16V   |  | C300    | 1-109-982-11 | CERAMIC CHIP 1UF     | 10.00% | 10V  |  |
| C222    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C301    | 1-126-204-11 | ELECT CHIP 47UF      | 20.00% | 16V  |  |
| C224    | 1-113-985-11   | TANTAL CHIP 10UF       | 20.00% | 20V   |  | C302    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
| C225    | 1-104-852-11   | TANTAL CHIP 22UF       | 20.00% | 10V   |  | C303    | 1-163-227-11 | CERAMIC CHIP 10PF    | 0.50PF | 50V  |  |
| C226    | 1-163-021-91   | CERAMIC CHIP 0.01UF    | 10.00% | 50V   |  | C304    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
| C227    | 1-117-681-11   | ELECT CHIP 100UF       | 20.00% | 16V   |  | C312    | 1-124-779-00 | ELECT CHIP 10UF      | 20.00% | 16V  |  |
| C228    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C313    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
| C230    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C314    | 1-107-823-11 | CERAMIC CHIP 0.47UF  | 10.00% | 16V  |  |
| C232    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C315    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
| C233    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C317    | 1-163-021-91 | CERAMIC CHIP 0.01UF  | 10.00% | 50V  |  |
| C234    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C318    | 1-126-603-11 | ELECT CHIP 4.7UF     | 20.00% | 35V  |  |
| C235    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C319    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
| C236    | 1-117-681-11   | ELECT CHIP 100UF       | 20.00% | 16V   |  | C320    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
| C237    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C321    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
| C238    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C322    | 1-164-004-11 | CERAMIC CHIP 0.1UF   | 10.00% | 25V  |  |
| C239    | 1-164-004-11   | CERAMIC CHIP 0.1UF     | 10.00% | 25V   |  | C323    | 1-125-838-11 | CERAMIC CHIP 2.2UF   | 10%    | 6.3V |  |

| Ref.No.        | Part No.       | Description                  | Remark  |        |      | Ref.No.      | Part No.     | Description | Remark |       |       |
|----------------|----------------|------------------------------|---------|--------|------|--------------|--------------|-------------|--------|-------|-------|
| C324           | 1-163-037-11   | CERAMIC CHIP                 | 0.022UF | 0.00%  | 50V  | <RESISTOR>   |              |             |        |       |       |
| C325           | 1-163-021-91   | CERAMIC CHIP                 | 0.01UF  | 10.00% | 50V  | R201         | 1-216-065-91 | RES-CHIP    | 4.7K   | 5%    | 1/10W |
| C326           | 1-109-982-11   | CERAMIC CHIP                 | 1UF     | 10.00% | 10V  | R202         | 1-216-073-00 | RES-CHIP    | 10K    | 5%    | 1/10W |
| C327           | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF   | 10.00% | 25V  | R203         | 1-216-025-11 | RES-CHIP    | 100    | 5%    | 1/10W |
| C328           | 1-109-982-11   | CERAMIC CHIP                 | 1UF     | 10.00% | 10V  | R204         | 1-216-025-11 | RES-CHIP    | 100    | 5%    | 1/10W |
| C330           | 1-163-021-91   | CERAMIC CHIP                 | 0.01UF  | 10.00% | 50V  | R205         | 1-216-025-11 | RES-CHIP    | 100    | 5%    | 1/10W |
| C331           | 1-126-204-11   | ELECT CHIP                   | 47UF    | 20.00% | 16V  | R206         | 1-216-025-11 | RES-CHIP    | 100    | 5%    | 1/10W |
| C332           | 1-163-021-91   | CERAMIC CHIP                 | 0.01UF  | 10.00% | 50V  | R207         | 1-216-025-11 | RES-CHIP    | 100    | 5%    | 1/10W |
| C333           | 1-126-204-11   | ELECT CHIP                   | 47UF    | 20.00% | 16V  | R208         | 1-216-025-11 | RES-CHIP    | 100    | 5%    | 1/10W |
| C334           | 1-163-021-91   | CERAMIC CHIP                 | 0.01UF  | 10.00% | 50V  | R209         | 1-216-025-11 | RES-CHIP    | 100    | 5%    | 1/10W |
| C337           | 1-163-021-91   | CERAMIC CHIP                 | 0.01UF  | 10.00% | 50V  | R210         | 1-216-025-11 | RES-CHIP    | 100    | 5%    | 1/10W |
| C338           | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF   | 10.00% | 25V  | R211         | 1-216-073-00 | RES-CHIP    | 10K    | 5%    | 1/10W |
| <CONNECTOR>    |                |                              |         |        | R212 | 1-216-073-00 | RES-CHIP     | 10K         | 5%     | 1/10W |       |
| CN201          | * 1-785-305-21 | CONNECTOR,BOARD TO BOARD 70P |         |        | R213 | 1-216-025-11 | RES-CHIP     | 100         | 5%     | 1/10W |       |
| <FERRITE BEAD> |                |                              |         |        | R214 | 1-216-025-11 | RES-CHIP     | 100         | 5%     | 1/10W |       |
| FB201          | 1-414-235-22   | INDUCTOR                     | 0UH     |        | R215 | 1-216-025-11 | RES-CHIP     | 100         | 5%     | 1/10W |       |
| FB202          | 1-500-245-11   | INDUCTOR                     | 0UH     |        | R216 | 1-216-073-00 | RES-CHIP     | 10K         | 5%     | 1/10W |       |
| FB271          | 1-414-235-22   | INDUCTOR                     | 0UH     |        | R217 | 1-216-073-00 | RES-CHIP     | 10K         | 5%     | 1/10W |       |
| <FILTER>       |                |                              |         |        | R218 | 1-216-073-00 | RES-CHIP     | 10K         | 5%     | 1/10W |       |
| FL221          | 1-239-397-11   | FILTER,LOW PASS              |         |        | R222 | 1-216-081-00 | RES-CHIP     | 22K         | 5%     | 1/10W |       |
| FL222          | 1-239-397-11   | FILTER,LOW PASS              |         |        | R223 | 1-216-065-91 | RES-CHIP     | 4.7K        | 5%     | 1/10W |       |
| FL223          | 1-239-397-11   | FILTER,LOW PASS              |         |        | R225 | 1-216-043-91 | RES-CHIP     | 560         | 5%     | 1/10W |       |
| FL301          | 1-239-899-21   | FILTER,CHIP EMI              |         |        | R227 | 1-216-049-11 | RES-CHIP     | 1K          | 5%     | 1/10W |       |
| FL302          | 1-239-899-21   | FILTER,CHIP EMI              |         |        | R228 | 1-216-049-11 | RES-CHIP     | 1K          | 5%     | 1/10W |       |
| FL303          | 1-239-899-21   | FILTER,CHIP EMI              |         |        | R230 | 1-216-085-00 | RES-CHIP     | 33K         | 5%     | 1/10W |       |
| <IC>           |                |                              |         |        | R231 | 1-216-051-00 | RES-CHIP     | 1.2K        | 5%     | 1/10W |       |
| IC201          | 8-752-072-94   | IC CXA1875AM-T4              |         |        | R234 | 1-216-067-00 | RES-CHIP     | 5.6K        | 5%     | 1/10W |       |
| IC202          | * 8-759-684-72 | IC M24C64-WMN6T (A)          |         |        | R235 | 1-216-043-91 | RES-CHIP     | 560         | 5%     | 1/10W |       |
| IC221          | 8-752-390-37   | IC CXD2064Q-T6               |         |        | R237 | 1-216-049-11 | RES-CHIP     | 1K          | 5%     | 1/10W |       |
| IC271          | 8-752-070-54   | IC CXA1839Q-T6               |         |        | R239 | 1-216-049-11 | RES-CHIP     | 1K          | 5%     | 1/10W |       |
| IC301          | 8-752-094-47   | IC CXA2123AQ-T6              |         |        | R242 | 1-216-067-00 | RES-CHIP     | 5.6K        | 5%     | 1/10W |       |
| IC302          | 8-759-494-88   | IC TC75S56F (TE85R)          |         |        | R243 | 1-216-043-91 | RES-CHIP     | 560         | 5%     | 1/10W |       |
| <COIL>         |                |                              |         |        | R244 | 1-216-025-11 | RES-CHIP     | 100         | 5%     | 1/10W |       |
| L221           | 1-414-753-91   | INDUCTOR                     | 4.7UH   |        | R245 | 1-216-049-11 | RES-CHIP     | 1K          | 5%     | 1/10W |       |
| L222           | 1-414-235-22   | INDUCTOR                     | 0UH     |        | R247 | 1-216-043-91 | RES-CHIP     | 560         | 5%     | 1/10W |       |
| L223           | 1-414-753-91   | INDUCTOR                     | 4.7UH   |        | R249 | 1-216-631-11 | METAL CHIP   | 150         | 0.5%   | 1/10W |       |
| L224           | 1-414-753-91   | INDUCTOR                     | 4.7UH   |        | R250 | 1-216-631-11 | METAL CHIP   | 150         | 0.5%   | 1/10W |       |
| L225           | 1-414-753-91   | INDUCTOR                     | 4.7UH   |        | R251 | 1-216-053-00 | RES-CHIP     | 1.5K        | 5%     | 1/10W |       |
| L226           | 1-414-753-91   | INDUCTOR                     | 4.7UH   |        | R252 | 1-216-061-00 | RES-CHIP     | 3.3K        | 5%     | 1/10W |       |
| L271           | 1-414-235-22   | INDUCTOR                     | 0UH     |        | R253 | 1-216-057-00 | RES-CHIP     | 2.2K        | 5%     | 1/10W |       |
| <TRANSISTOR>   |                |                              |         |        | R254 | 1-216-091-00 | RES-CHIP     | 56K         | 5%     | 1/10W |       |
| Q221           | 8-729-230-49   | TRANSISTOR 2SC2712-YG-TE85L  |         |        | R255 | 1-216-043-91 | RES-CHIP     | 560         | 5%     | 1/10W |       |
| Q222           | 8-729-216-22   | TRANSISTOR 2SA1162-YG-TE85L  |         |        | R256 | 1-216-295-11 | SHORT        | 0           |        |       |       |
| Q226           | 8-729-216-22   | TRANSISTOR 2SA1162-YG-TE85L  |         |        | R258 | 1-216-295-11 | SHORT        | 0           |        |       |       |
| Q227           | 8-729-230-49   | TRANSISTOR 2SC2712-YG-TE85L  |         |        | R259 | 1-216-295-11 | SHORT        | 0           |        |       |       |
| Q228           | 8-729-216-22   | TRANSISTOR 2SA1162-YG-TE85L  |         |        | R271 | 1-216-025-11 | RES-CHIP     | 100         | 5%     | 1/10W |       |
| Q229           | 8-729-230-49   | TRANSISTOR 2SC2712-YG-TE85L  |         |        | R272 | 1-216-635-11 | METAL CHIP   | 220         | 0.5%   | 1/10W |       |
| Q271           | 8-729-013-28   | TRANSISTOR HN1B01FU-TE85R    |         |        | R273 | 1-216-655-11 | METAL CHIP   | 1.5K        | 0.5%   | 1/10W |       |
| Q272           | 8-729-013-28   | TRANSISTOR HN1B01FU-TE85R    |         |        | R274 | 1-216-083-00 | RES-CHIP     | 27K         | 5%     | 1/10W |       |
| Q273           | 8-729-013-28   | TRANSISTOR HN1B01FU-TE85R    |         |        | R275 | 1-216-295-11 | SHORT        | 0           |        |       |       |
| Q302           | 8-729-230-49   | TRANSISTOR 2SC2712-YG-TE85L  |         |        | R276 | 1-216-081-00 | RES-CHIP     | 22K         | 5%     | 1/10W |       |
| Q303           | 8-729-230-49   | TRANSISTOR 2SC2712-YG-TE85L  |         |        | R277 | 1-216-085-00 | RES-CHIP     | 33K         | 5%     | 1/10W |       |
|                |                |                              |         |        | R278 | 1-216-647-11 | METAL CHIP   | 680         | 0.5%   | 1/10W |       |
|                |                |                              |         |        | R279 | 1-216-655-11 | METAL CHIP   | 1.5K        | 0.5%   | 1/10W |       |
|                |                |                              |         |        | R280 | 1-216-081-00 | RES-CHIP     | 22K         | 5%     | 1/10W |       |
|                |                |                              |         |        | R281 | 1-216-295-11 | SHORT        | 0           |        |       |       |
|                |                |                              |         |        | R282 | 1-216-085-00 | RES-CHIP     | 33K         | 5%     | 1/10W |       |
|                |                |                              |         |        | R283 | 1-216-073-00 | RES-CHIP     | 10K         | 5%     | 1/10W |       |
|                |                |                              |         |        | R284 | 1-216-025-11 | RES-CHIP     | 100         | 5%     | 1/10W |       |
|                |                |                              |         |        | R285 | 1-216-025-11 | RES-CHIP     | 100         | 5%     | 1/10W |       |
|                |                |                              |         |        | R286 | 1-216-651-11 | METAL CHIP   | 1K          | 0.5%   | 1/10W |       |
|                |                |                              |         |        | R287 | 1-216-651-11 | METAL CHIP   | 1K          | 0.5%   | 1/10W |       |
|                |                |                              |         |        | R288 | 1-216-025-11 | RES-CHIP     | 100         | 5%     | 1/10W |       |
|                |                |                              |         |        | R289 | 1-216-025-11 | RES-CHIP     | 100         | 5%     | 1/10W |       |
|                |                |                              |         |        | R290 | 1-216-025-11 | RES-CHIP     | 100         | 5%     | 1/10W |       |
|                |                |                              |         |        | R291 | 1-216-081-00 | RES-CHIP     | 22K         | 5%     | 1/10W |       |

| Ref.No. | Part No.       | Description      | Remark        |        |       | Ref.No. | Part No.     | Description  | Remark  |        |      |
|---------|----------------|------------------|---------------|--------|-------|---------|--------------|--------------|---------|--------|------|
| R292    | 1-216-085-00   | RES-CHIP         | 33K           | 5%     | 1/10W | C430    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R293    | 1-216-295-11   | SHORT            | 0             |        |       | C431    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
| R294    | 1-216-049-11   | RES-CHIP         | 1K            | 5%     | 1/10W | C432    | 1-124-778-00 | ELECT CHIP   | 22UF    | 20.00% | 6.3V |
| R296    | 1-216-033-00   | RES-CHIP         | 220           | 5%     | 1/10W | C433    | 1-115-566-11 | CERAMIC CHIP | 4.7UF   | 10.00% | 10V  |
| R298    | 1-216-025-11   | RES-CHIP         | 100           | 5%     | 1/10W | C434    | 1-115-566-11 | CERAMIC CHIP | 4.7UF   | 10.00% | 10V  |
| R299    | 1-216-025-11   | RES-CHIP         | 100           | 5%     | 1/10W | C435    | 1-115-566-11 | CERAMIC CHIP | 4.7UF   | 10.00% | 10V  |
| R300    | 1-216-025-11   | RES-CHIP         | 100           | 5%     | 1/10W | C436    | 1-110-563-11 | CERAMIC CHIP | 0.068UF | 10.00% | 16V  |
| R302    | 1-216-295-11   | SHORT            | 0             |        |       | C437    | 1-124-779-00 | ELECT CHIP   | 10UF    | 20.00% | 16V  |
| R303    | 1-216-295-11   | SHORT            | 0             |        |       | C438    | 1-162-927-11 | CERAMIC CHIP | 100PF   | 5.00%  | 50V  |
| R304    | 1-208-796-11   | METAL CHIP       | 3.9K          | 0.5%   | 1/10W | C439    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R305    | 1-216-025-11   | RES-CHIP         | 100           | 5%     | 1/10W | C440    | 1-162-927-11 | CERAMIC CHIP | 100PF   | 5.00%  | 50V  |
| R306    | 1-216-037-00   | RES-CHIP         | 330           | 5%     | 1/10W | C442    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R309    | 1-216-663-11   | METAL CHIP       | 3.3K          | 0.5%   | 1/10W | C443    | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
| R310    | 1-216-685-11   | METAL CHIP       | 27K           | 0.5%   | 1/10W | C444    | 1-124-778-00 | ELECT CHIP   | 22UF    | 20.00% | 6.3V |
| R311    | 1-216-667-11   | METAL CHIP       | 4.7K          | 0.5%   | 1/10W | C445    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R312    | 1-216-025-11   | RES-CHIP         | 100           | 5%     | 1/10W | C446    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R313    | 1-216-025-11   | RES-CHIP         | 100           | 5%     | 1/10W | C447    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R314    | 1-216-049-11   | RES-CHIP         | 1K            | 5%     | 1/10W | C448    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R315    | 1-216-049-11   | RES-CHIP         | 1K            | 5%     | 1/10W | C449    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R316    | 1-216-061-00   | RES-CHIP         | 3.3K          | 5%     | 1/10W | C450    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R317    | 1-216-069-00   | RES-CHIP         | 6.8K          | 5%     | 1/10W | C451    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R318    | 1-216-017-91   | RES-CHIP         | 47            | 5%     | 1/10W | C452    | 1-110-563-11 | CERAMIC CHIP | 0.068UF | 10.00% | 16V  |
| R319    | 1-216-017-91   | RES-CHIP         | 47            | 5%     | 1/10W | C453    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
| R320    | 1-216-017-91   | RES-CHIP         | 47            | 5%     | 1/10W | C454    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R321    | 1-216-025-11   | RES-CHIP         | 100           | 5%     | 1/10W | C455    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R322    | 1-216-295-11   | SHORT            | 0             |        |       | C456    | 1-110-563-11 | CERAMIC CHIP | 0.068UF | 10.00% | 16V  |
| R324    | 1-216-017-91   | RES-CHIP         | 47            | 5%     | 1/10W | C457    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
|         | <CRYSTAL>      |                  |               |        |       | C458    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|         |                |                  |               |        |       | C459    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| X301    | 1-781-914-21   | VIBRATOR,CRYSTAL |               |        |       | C460    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| *****   |                |                  |               |        |       | C461    | 1-110-563-11 | CERAMIC CHIP | 0.068UF | 10.00% | 16V  |
|         |                |                  |               |        |       | C462    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|         |                |                  |               |        |       | C463    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
|         |                |                  |               |        |       | C464    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|         |                |                  |               |        |       | C465    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|         | * A-1136-136-A | B COMPL          | (For VPL-CS2) |        |       | C467    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|         |                | *****            |               |        |       | C468    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|         | * A-1136-148-A | B COMPL          | (For VPL-CX1) |        |       | C469    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|         |                | *****            |               |        |       | C470    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|         | <CAPACITOR>    |                  |               |        |       | C471    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
| C401    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C472    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C402    | 1-162-927-11   | CERAMIC CHIP     | 100PF         | 5.00%  | 50V   | C473    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C403    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C474    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C404    | 1-162-970-11   | CERAMIC CHIP     | 0.01UF        | 10.00% | 25V   | C475    | 1-115-467-11 | CERAMIC CHIP | 0.22UF  | 10.00% | 10V  |
| C405    | 1-126-204-11   | ELECT CHIP       | 47UF          | 20.00% | 16V   | C476    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C406    | 1-126-205-11   | ELECT CHIP       | 47UF          | 20.00% | 6.3V  | C477    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C407    | 1-126-205-11   | ELECT CHIP       | 47UF          | 20.00% | 6.3V  | C478    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C408    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C479    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C409    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C480    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C410    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C481    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C411    | 1-162-927-11   | CERAMIC CHIP     | 100PF         | 5.00%  | 50V   | C482    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C412    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C483    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C413    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C484    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C414    | 1-162-970-11   | CERAMIC CHIP     | 0.01UF        | 10.00% | 25V   | C485    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C415    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C486    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C416    | 1-162-967-11   | CERAMIC CHIP     | 0.0033UF      | 10.00% | 50V   | C487    | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
| C417    | 1-126-204-11   | ELECT CHIP       | 47UF          | 20.00% | 16V   | C488    | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V  |
| C420    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C489    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C421    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C490    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C422    | 1-162-970-11   | CERAMIC CHIP     | 0.01UF        | 10.00% | 25V   | C491    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C424    | 1-126-204-11   | ELECT CHIP       | 47UF          | 20.00% | 16V   | C492    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C426    | 1-107-826-11   | CERAMIC CHIP     | 0.1UF         | 10.00% | 16V   | C495    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C427    | 1-115-566-11   | CERAMIC CHIP     | 4.7UF         | 10.00% | 10V   | C496    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C428    | 1-164-816-11   | CERAMIC CHIP     | 220PF         | 2.00%  | 50V   | C497    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C429    | 1-115-566-11   | CERAMIC CHIP     | 4.7UF         | 10.00% | 10V   | C498    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |

| Ref.No. | Part No.     | Description  | Remark            | Ref.No.        | Part No.       | Description                    | Remark |
|---------|--------------|--------------|-------------------|----------------|----------------|--------------------------------|--------|
| C503    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | <CONNECTOR>    |                |                                |        |
| C504    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V  | CN401          | * 1-785-305-21 | CONNECTOR,BOARD TO BOARD 70P   |        |
| C505    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | CN402          | * 1-793-797-21 | CONNECTOR,BOARD TO BOARD 50P   |        |
| C506    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | CN403          | * 1-793-797-21 | CONNECTOR,BOARD TO BOARD 50P   |        |
| C507    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | CN404          | 1-569-577-41   | CONNECTOR,D-SUB 15P            |        |
| C508    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | CN405          | * 1-785-305-21 | CONNECTOR,BOARD TO BOARD 70P   |        |
| C509    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | CN406          | * 1-691-591-11 | PIN,CONNECTOR (1.5MM) (SMD) 8P |        |
| C510    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | <DIODE>        |                |                                |        |
| C511    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D401           | 8-719-800-76   | DIODE MA157-TX                 |        |
| C512    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D402           | 8-719-800-76   | DIODE MA157-TX                 |        |
| C513    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D403           | 8-719-800-76   | DIODE MA157-TX                 |        |
| C514    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D404           | 8-719-024-77   | DIODE HN1D03FU-TE85R           |        |
| C515    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D408           | 8-719-024-77   | DIODE HN1D03FU-TE85R           |        |
| C516    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D409           | 8-719-024-77   | DIODE HN1D03FU-TE85R           |        |
| C517    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D410           | 8-719-158-15   | DIODE RD5.6SB-T1               |        |
| C518    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D411           | 8-719-158-15   | DIODE RD5.6SB-T1               |        |
| C519    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D412           | 8-719-158-15   | DIODE RD5.6SB-T1               |        |
| C520    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D413           | 8-719-988-61   | DIODE 1SS355TE-17              |        |
| C521    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D414           | 8-719-988-61   | DIODE 1SS355TE-17              |        |
| C522    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | D415           | 8-719-158-15   | DIODE RD5.6SB-T1               |        |
| C523    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | <FERRITE BEAD> |                |                                |        |
| C524    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB401          | 1-414-921-11   | INDUCTOR 0UH                   |        |
| C525    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB402          | 1-414-234-22   | INDUCTOR 0UH                   |        |
| C526    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB403          | 1-414-234-22   | INDUCTOR 0UH                   |        |
| C527    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB404          | 1-414-234-22   | INDUCTOR 0UH                   |        |
| C528    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB405          | 1-414-234-22   | INDUCTOR 0UH                   |        |
| C529    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB406          | 1-414-234-22   | INDUCTOR 0UH                   |        |
| C530    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB407          | 1-414-234-22   | INDUCTOR 0UH                   |        |
| C531    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB409          | 1-414-234-22   | INDUCTOR 0UH                   |        |
| C532    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB410          | 1-414-921-11   | INDUCTOR 0UH                   |        |
| C533    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB411          | 1-414-921-11   | INDUCTOR 0UH                   |        |
| C534    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FB413          | 1-414-921-11   | INDUCTOR 0UH                   |        |
| C535    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | <FILTER>       |                |                                |        |
| C537    | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10.00% 25V | FL402          | 1-239-898-31   | FILTER,EMI (SMD)               |        |
| C538    | 1-115-156-11 | CERAMIC CHIP | 1UF 10V           | FL403          | 1-239-898-31   | FILTER,EMI (SMD)               |        |
| C539    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | FL404          | 1-216-296-91   | SHORT 0                        |        |
| C540    | 1-115-156-11 | CERAMIC CHIP | 1UF 10V           | <IC>           |                |                                |        |
| C541    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC401          | 8-759-472-00   | IC 74VHC14MTCX                 |        |
| C543    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC402          | 8-759-472-37   | IC 74VHC240MTCX                |        |
| C544    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC403          | 8-759-196-96   | IC TC7SH08FU-TE85R             |        |
| C545    | 1-164-315-11 | CERAMIC CHIP | 470PF 5.00% 50V   | IC404          | 8-759-541-25   | IC M52758FP                    |        |
| C546    | 1-162-915-11 | CERAMIC CHIP | 10PF 0.50PF 50V   | IC405          | 8-759-472-35   | IC 74VHC221AMTCX               |        |
| C547    | 1-162-915-11 | CERAMIC CHIP | 10PF 0.50PF 50V   | IC406          | 8-752-072-94   | IC CXA1875AM-T4                |        |
| C548    | 1-124-778-00 | ELECT CHIP   | 22UF 20.00% 6.3V  | IC407          | 8-759-646-02   | IC M52347FP-TE                 |        |
| C549    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC408          | 8-759-475-39   | IC TC74LCX74FT(EL)             |        |
| C550    | 1-124-778-00 | ELECT CHIP   | 22UF 20.00% 6.3V  | IC409          | 8-759-645-12   | IC AD9884AKS-140               |        |
| C551    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC411          | 8-759-472-14   | IC 74VHC125MTCX                |        |
| C553    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC412          | 8-759-676-30   | IC CXD9575TQ                   |        |
| C554    | 1-162-927-11 | CERAMIC CHIP | 100PF 5.00% 50V   | IC413          | 8-759-683-96   | IC MK1714-01RT                 |        |
| C555    | 1-124-778-00 | ELECT CHIP   | 22UF 20.00% 6.3V  | IC414          | 8-759-665-38   | IC MB81F161622C-80FN           |        |
| C556    | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10.00% 25V | IC415          | 8-759-665-38   | IC MB81F161622C-80FN           |        |
| C557    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC416          | 8-759-665-38   | IC MB81F161622C-80FN           |        |
| C558    | 1-124-778-00 | ELECT CHIP   | 22UF 20.00% 6.3V  | IC417          | 8-759-687-69   | IC IP00C712                    |        |
| C559    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC418          | 8-759-472-59   | IC 74VHC541MTCX                |        |
| C561    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC419          | 8-759-582-91   | IC S-80842ANNP-ED6-T2          |        |
| C563    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC420          | 8-759-544-01   | IC S-80828ANNP-EDR-T2          |        |
| C564    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  | IC421          | 8-759-686-69   | IC NC7WZ04P6X                  |        |
| C565    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  |                |                |                                |        |
| C566    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  |                |                |                                |        |
| C567    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  |                |                |                                |        |
| C571    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  |                |                |                                |        |
| C572    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  |                |                |                                |        |
| C575    | 1-162-916-11 | CERAMIC CHIP | 12PF 5.00% 50V    |                |                |                                |        |
| C576    | 1-162-916-11 | CERAMIC CHIP | 12PF 5.00% 50V    |                |                |                                |        |
| C578    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V  |                |                |                                |        |
| C582    | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10.00% 25V |                |                |                                |        |



| Ref.No. | Part No.     | Description                | Remark |  |  | Ref.No. | Part No.     | Description | Remark |      |       |
|---------|--------------|----------------------------|--------|--|--|---------|--------------|-------------|--------|------|-------|
| IC424   | 8-759-682-98 | IC MB90098APF-G-118-BND-ER |        |  |  | R426    | 1-216-625-11 | METAL CHIP  | 82     | 0.5% | 1/10W |
| IC426   | 8-759-557-86 | IC NC7SZ86P5X              |        |  |  | R427    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| IC427   | 8-759-648-   | IC HD64F2633TE             |        |  |  |         |              |             |        |      |       |
| IC429   | 8-759-661-55 | IC 24LC21AT/SN             |        |  |  | R428    | 1-216-817-11 | RES-CHIP    | 470    | 5%   | 1/16W |
|         |              |                            |        |  |  | R429    | 1-216-817-11 | RES-CHIP    | 470    | 5%   | 1/16W |
|         |              |                            |        |  |  | R430    | 1-216-817-11 | RES-CHIP    | 470    | 5%   | 1/16W |
|         |              |                            |        |  |  | R431    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
|         |              |                            |        |  |  | R432    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R433    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |                            |        |  |  | R434    | 1-218-708-11 | METAL CHIP  | 4.7K   | 0.5% | 1/16W |
|         |              |                            |        |  |  | R435    | 1-216-821-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
|         |              |                            |        |  |  | R436    | 1-216-821-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
|         |              |                            |        |  |  | R437    | 1-216-841-11 | RES-CHIP    | 47K    | 5%   | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R438    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |                            |        |  |  | R439    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
|         |              |                            |        |  |  | R440    | 1-216-821-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
|         |              |                            |        |  |  | R443    | 1-216-827-11 | RES-CHIP    | 3.3K   | 5%   | 1/16W |
|         |              |                            |        |  |  | R444    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R445    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |                            |        |  |  | R446    | 1-218-732-11 | METAL CHIP  | 47K    | 0.5% | 1/16W |
|         |              |                            |        |  |  | R447    | 1-216-821-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
|         |              |                            |        |  |  | R448    | 1-216-811-11 | RES-CHIP    | 150    | 5%   | 1/16W |
|         |              |                            |        |  |  | R449    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R450    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |                            |        |  |  | R451    | 1-216-821-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
|         |              |                            |        |  |  | R452    | 1-216-821-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
|         |              |                            |        |  |  | R453    | 1-216-810-11 | RES-CHIP    | 120    | 5%   | 1/16W |
|         |              |                            |        |  |  | R454    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R455    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
|         |              |                            |        |  |  | R456    | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |
|         |              |                            |        |  |  | R458    | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |
|         |              |                            |        |  |  | R459    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
|         |              |                            |        |  |  | R461    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R462    | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |
|         |              |                            |        |  |  | R464    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |                            |        |  |  | R465    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |                            |        |  |  | R468    | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |
|         |              |                            |        |  |  | R469    | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R470    | 1-216-827-11 | RES-CHIP    | 3.3K   | 5%   | 1/16W |
|         |              |                            |        |  |  | R471    | 1-216-827-11 | RES-CHIP    | 3.3K   | 5%   | 1/16W |
|         |              |                            |        |  |  | R472    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
|         |              |                            |        |  |  | R473    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
|         |              |                            |        |  |  | R474    | 1-218-694-11 | METAL CHIP  | 1.2K   | 0.5% | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R475    | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |
|         |              |                            |        |  |  | R476    | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |
|         |              |                            |        |  |  | R477    | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |
|         |              |                            |        |  |  | R479    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
|         |              |                            |        |  |  | R480    | 1-216-839-11 | RES-CHIP    | 33K    | 5%   | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R481    | 1-216-839-11 | RES-CHIP    | 33K    | 5%   | 1/16W |
|         |              |                            |        |  |  | R483    | 1-216-821-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
|         |              |                            |        |  |  | R485    | 1-216-841-11 | RES-CHIP    | 47K    | 5%   | 1/16W |
|         |              |                            |        |  |  | R487    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
|         |              |                            |        |  |  | R488    | 1-218-675-11 | METAL CHIP  | 200    | 0.5% | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R489    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
|         |              |                            |        |  |  | R490    | 1-218-703-11 | METAL CHIP  | 3K     | 0.5% | 1/16W |
|         |              |                            |        |  |  | R491    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
|         |              |                            |        |  |  | R494    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |                            |        |  |  | R495    | 1-216-821-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R497    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
|         |              |                            |        |  |  | R500    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |                            |        |  |  | R501    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
|         |              |                            |        |  |  | R502    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
|         |              |                            |        |  |  | R503    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W |
|         |              |                            |        |  |  |         |              |             |        |      |       |
|         |              |                            |        |  |  | R504    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
|         |              |                            |        |  |  | R505    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W |
|         |              |                            |        |  |  | R506    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
|         |              |                            |        |  |  | R507    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |

| Ref.No. | Part No.     | Description | Remark |    |       | Ref.No.      | Part No.     | Description        | Remark        |    |       |
|---------|--------------|-------------|--------|----|-------|--------------|--------------|--------------------|---------------|----|-------|
| R508    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | R581         | 1-216-809-11 | RES-CHIP           | 100           | 5% | 1/16W |
| R509    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | R582         | 1-216-805-11 | RES-CHIP           | 47            | 5% | 1/16W |
| R510    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | R583         | 1-216-809-11 | RES-CHIP           | 100           | 5% | 1/16W |
| R511    | 1-216-801-11 | RES-CHIP    | 22     | 5% | 1/16W | R584         | 1-216-833-11 | RES-CHIP           | 10K           | 5% | 1/16W |
| R512    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | R585         | 1-216-797-11 | RES-CHIP           | 10            | 5% | 1/16W |
| R513    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W |              |              |                    |               |    |       |
| R514    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | R586         | 1-216-805-11 | RES-CHIP           | 47            | 5% | 1/16W |
| R515    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | R587         | 1-216-835-11 | RES-CHIP           | 15K           | 5% | 1/16W |
| R516    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | R588         | 1-216-835-11 | RES-CHIP           | 15K           | 5% | 1/16W |
| R517    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | R589         | 1-216-841-11 | RES-CHIP           | 47K           | 5% | 1/16W |
| R518    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | R590         | 1-216-845-11 | RES-CHIP           | 100K          | 5% | 1/16W |
|         |              |             |        |    |       |              |              |                    |               |    |       |
| R519    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | R591         | 1-216-805-11 | RES-CHIP           | 47            | 5% | 1/16W |
| R520    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | R592         | 1-216-805-11 | RES-CHIP           | 47            | 5% | 1/16W |
| R521    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | R593         | 1-216-813-11 | RES-CHIP           | 220           | 5% | 1/16W |
| R522    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | R594         | 1-216-817-11 | RES-CHIP           | 470           | 5% | 1/16W |
| R523    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | R595         | 1-216-817-11 | RES-CHIP           | 470           | 5% | 1/16W |
|         |              |             |        |    |       |              |              |                    |               |    |       |
| R524    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5% | 1/16W | R597         | 1-216-821-11 | RES-CHIP           | 1K            | 5% | 1/16W |
| R525    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5% | 1/16W |              |              |                    |               |    |       |
| R526    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | <NETWORK>    |              |                    |               |    |       |
| R527    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB401        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R528    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB402        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
|         |              |             |        |    |       | RB403        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R529    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | RB404        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R530    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | RB405        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R531    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W |              |              |                    |               |    |       |
| R532    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB406        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R533    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB407        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
|         |              |             |        |    |       | RB408        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R534    | 1-216-811-11 | RES-CHIP    | 150    | 5% | 1/16W | RB409        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R535    | 1-216-811-11 | RES-CHIP    | 150    | 5% | 1/16W | RB410        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R536    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W |              |              |                    |               |    |       |
| R537    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | RB411        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R538    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | RB412        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
|         |              |             |        |    |       | RB413        | 1-239-409-11 | RES,CHIP NETWORK   | 47 (3216)     |    |       |
| R539    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | RB414        | 1-239-409-11 | RES,CHIP NETWORK   | 47 (3216)     |    |       |
| R540    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB415        | 1-239-409-11 | RES,CHIP NETWORK   | 47 (3216)     |    |       |
| R541    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W |              |              |                    |               |    |       |
| R542    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB416        | 1-239-409-11 | RES,CHIP NETWORK   | 47 (3216)     |    |       |
| R543    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB417        | 1-239-409-11 | RES,CHIP NETWORK   | 47 (3216)     |    |       |
|         |              |             |        |    |       | RB418        | 1-239-409-11 | RES,CHIP NETWORK   | 47 (3216)     |    |       |
| R544    | 1-216-789-11 | RES-CHIP    | 2.2    | 5% | 1/16W | RB419        | 1-239-409-11 | RES,CHIP NETWORK   | 47 (3216)     |    |       |
| R545    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB520        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R546    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W |              |              |                    |               |    |       |
| R547    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB521        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R548    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB522        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
|         |              |             |        |    |       | RB523        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R549    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | RB524        | 1-233-576-11 | RES,CHIP NETWORK   | 100           |    |       |
| R550    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W |              |              |                    |               |    |       |
| R551    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | <THERMISTOR> |              |                    |               |    |       |
| R553    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | TH201        | 1-809-020-11 | THERMISTOR         |               |    |       |
| R554    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W |              |              |                    |               |    |       |
|         |              |             |        |    |       |              |              |                    |               |    |       |
| R555    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5% | 1/16W | <TEST PIN>   |              |                    |               |    |       |
| R556    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5% | 1/16W | TP401        | 1-535-757-11 | CHIP,CHECKER       |               |    |       |
| R557    | 1-216-821-11 | RES-CHIP    | 1K     | 5% | 1/16W | TP402        | 1-535-757-11 | CHIP,CHECKER       |               |    |       |
| R558    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | TP403        | 1-535-757-11 | CHIP,CHECKER       |               |    |       |
| R559    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | TP404        | 1-535-757-11 | CHIP,CHECKER       |               |    |       |
|         |              |             |        |    |       | TP405        | 1-535-757-11 | CHIP,CHECKER       |               |    |       |
| R560    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W |              |              |                    |               |    |       |
| R561    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | TP406        | 1-535-757-11 | CHIP,CHECKER       |               |    |       |
| R562    | 1-216-809-11 | RES-CHIP    | 100    | 5% | 1/16W | TP407        | 1-535-757-11 | CHIP,CHECKER       |               |    |       |
| R563    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W |              |              |                    |               |    |       |
| R564    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | <CRYSTAL>    |              |                    |               |    |       |
|         |              |             |        |    |       | X402         | 1-795-011-21 | OSCILLATOR,CRYSTAL |               |    |       |
| R565    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W | X403         | 1-781-659-21 | VIBRATOR,CRYSTAL   |               |    |       |
| R568    | 1-216-821-11 | RES-CHIP    | 1K     | 5% | 1/16W | X404         | 1-767-908-11 | VIBRATOR,CRYSTAL   | 13.08384MHZ   |    |       |
| R569    | 1-216-821-11 | RES-CHIP    | 1K     | 5% | 1/16W |              |              |                    | (For VPL-CS2) |    |       |
| R570    | 1-216-821-11 | RES-CHIP    | 1K     | 5% | 1/16W | X404         | 1-781-535-21 | VIBRATOR,CRYSTAL   | 17.26272MHZ   |    |       |
| R571    | 1-216-821-11 | RES-CHIP    | 1K     | 5% | 1/16W |              |              |                    | (For VPL-CX1) |    |       |
|         |              |             |        |    |       |              |              |                    |               |    |       |
| R574    | 1-216-864-11 | SHORT       | 0      |    |       |              |              |                    |               |    |       |
| R575    | 1-216-864-11 | SHORT       | 0      |    |       |              |              |                    |               |    |       |
| R576    | 1-216-821-11 | RES-CHIP    | 1K     | 5% | 1/16W |              |              |                    |               |    |       |
| R577    | 1-216-821-11 | RES-CHIP    | 1K     | 5% | 1/16W |              |              |                    |               |    |       |
| R580    | 1-216-833-11 | RES-CHIP    | 10K    | 5% | 1/16W |              |              |                    |               |    |       |

| Ref.No.                 | Part No.     | Description  | Remark              | Ref.No.        | Part No.       | Description                  | Remark      |
|-------------------------|--------------|--------------|---------------------|----------------|----------------|------------------------------|-------------|
| *****                   |              |              |                     | C163           | 1-124-778-00   | ELECT CHIP 22UF              | 20.00% 6.3V |
| * A-1275-186-C QA COMPL |              |              |                     | C164           | 1-163-239-11   | CERAMIC CHIP 33PF            | 5.00% 50V   |
| *****                   |              |              |                     | C165           | 1-163-239-11   | CERAMIC CHIP 33PF            | 5.00% 50V   |
| <CAPACITOR>             |              |              |                     | C166           | 1-164-004-11   | CERAMIC CHIP 0.1UF           | 10.00% 25V  |
| C101                    | 1-124-779-00 | ELECT CHIP   | 10UF 20.00% 16V     | C169           | 1-164-004-11   | CERAMIC CHIP 0.1UF           | 10.00% 25V  |
| C102                    | 1-126-204-11 | ELECT CHIP   | 47UF 20.00% 16V     | <CONNECTOR>    |                |                              |             |
| C103                    | 1-126-204-11 | ELECT CHIP   | 47UF 20.00% 16V     | CN101          | * 1-580-057-11 | PIN,CONNECTOR (SMD) 4P       |             |
| C104                    | 1-113-985-11 | TANTAL CHIP  | 10UF 20.00% 20V     | CN102          | * 1-760-388-11 | CONNECTORPIN (SMD) 9P        |             |
| C105                    | 1-113-985-11 | TANTAL CHIP  | 10UF 20.00% 20V     | CN103          | * 1-785-306-21 | CONNECTOR,BOARD TO BOARD 70P |             |
| C106                    | 1-126-395-11 | ELECT CHIP   | 22UF 20.00% 16V     | CN104          | * 1-785-306-21 | CONNECTOR,BOARD TO BOARD 70P |             |
| C107                    | 1-126-395-11 | ELECT CHIP   | 22UF 20.00% 16V     | CN105          | * 1-793-798-21 | CONNECTOR,BOARD TO BOARD 50P |             |
| C108                    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V    | CN106          | 1-784-292-11   | CONNECTOR,MINIATURE DIN 4P   |             |
| C109                    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V    | CN122          | 1-794-081-21   | CONNECTOR,ROUND TYPE 6P      |             |
| C110                    | 1-126-397-11 | ELECT CHIP   | 33UF 20.00% 25V     | CN123          | * 1-580-056-21 | PIN,CONNECTOR (SMD) 3P       |             |
| C111                    | 1-126-204-11 | ELECT CHIP   | 47UF 20.00% 16V     | <DIODE>        |                |                              |             |
| C112                    | 1-126-395-11 | ELECT CHIP   | 22UF 20.00% 16V     | D101           | 8-719-158-15   | DIODE RD5.6SB-T1             |             |
| C113                    | 1-131-998-21 | ELECT        | 82UF 20% 6.3V       | D102           | 8-719-158-15   | DIODE RD5.6SB-T1             |             |
| C114                    | 1-164-182-11 | CERAMIC CHIP | 0.0033UF 10.00% 50V | D103           | 8-719-158-15   | DIODE RD5.6SB-T1             |             |
| C115                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | D104           | 8-719-158-15   | DIODE RD5.6SB-T1             |             |
| C116                    | 1-126-395-11 | ELECT CHIP   | 22UF 20.00% 16V     | D105           | 8-719-158-37   | DIODE RD9.1SB2-T1            |             |
| C117                    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V    | D106           | 8-719-158-37   | DIODE RD9.1SB2-T1            |             |
| C118                    | 1-119-667-11 | CERAMIC CHIP | 22UF 10V            | D107           | 8-719-055-30   | DIODE D1FS4A-TA              |             |
| C119                    | 1-113-500-11 | TANTAL CHIP  | 100UF 20.00% 10V    | D108           | 8-719-055-30   | DIODE D1FS4A-TA              |             |
| C120                    | 1-109-982-11 | CERAMIC CHIP | 1UF 10.00% 10V      | D109           | 8-719-988-61   | DIODE 1SS355TE-17            |             |
| C121                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | D121           | 8-719-058-24   | DIODE RB501V-40TE-17         |             |
| C122                    | 1-117-681-11 | ELECT CHIP   | 100UF 20.00% 16V    | D122           | 8-719-158-15   | DIODE RD5.6SB-T1             |             |
| C123                    | 1-119-667-11 | CERAMIC CHIP | 22UF 10V            | D123           | 8-719-058-24   | DIODE RB501V-40TE-17         |             |
| C124                    | 1-109-982-11 | CERAMIC CHIP | 1UF 10.00% 10V      | D124           | 8-719-422-12   | DIODE UDZ-TE-17-3.9B         |             |
| C125                    | 1-163-251-11 | CERAMIC CHIP | 100PF 5.00% 50V     | D125           | 8-719-422-12   | DIODE UDZ-TE-17-3.9B         |             |
| C126                    | 1-163-251-11 | CERAMIC CHIP | 100PF 5.00% 50V     | D126           | 8-719-158-15   | DIODE RD5.6SB-T1             |             |
| C127                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | D127           | 8-719-158-15   | DIODE RD5.6SB-T1             |             |
| C128                    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V    | D128           | 8-719-158-15   | DIODE RD5.6SB-T1             |             |
| C129                    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V    | D129           | 8-719-422-12   | DIODE UDZ-TE-17-3.9B         |             |
| C130                    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V    | D130           | 8-719-422-12   | DIODE UDZ-TE-17-3.9B         |             |
| C131                    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V    | D131           | 8-719-914-43   | DIODE DAN202K-T-146          |             |
| C132                    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V    | D133           | 8-719-058-24   | DIODE RB501V-40TE-17         |             |
| C133                    | 1-163-251-11 | CERAMIC CHIP | 100PF 5.00% 50V     | D135           | 8-719-058-24   | DIODE RB501V-40TE-17         |             |
| C134                    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V    | <FERRITE BEAD> |                |                              |             |
| C135                    | 1-109-982-11 | CERAMIC CHIP | 1UF 10.00% 10V      | FB121          | 1-414-234-22   | INDUCTOR 0UH                 |             |
| C136                    | 1-117-370-11 | CERAMIC CHIP | 10UF 10V            | FB122          | 1-469-185-11   | FERRITE 0UH                  |             |
| C137                    | 1-163-251-11 | CERAMIC CHIP | 100PF 5.00% 50V     | FB123          | 1-414-234-22   | INDUCTOR 0UH                 |             |
| C138                    | 1-109-982-11 | CERAMIC CHIP | 1UF 10.00% 10V      | FB124          | 1-414-234-22   | INDUCTOR 0UH                 |             |
| C139                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FB125          | 1-469-185-11   | FERRITE 0UH                  |             |
| C140                    | 1-163-021-91 | CERAMIC CHIP | 0.01UF 10.00% 50V   | FB126          | 1-216-295-11   | SHORT 0                      |             |
| C141                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FB127          | 1-469-185-11   | FERRITE 0UH                  |             |
| C142                    | 1-126-206-11 | ELECT CHIP   | 100UF 20.00% 6.3V   | FB128          | 1-414-234-22   | INDUCTOR 0UH                 |             |
| C143                    | 1-163-021-91 | CERAMIC CHIP | 0.01UF 10.00% 50V   | FB129          | 1-414-234-22   | INDUCTOR 0UH                 |             |
| C144                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FB130          | 1-414-234-22   | INDUCTOR 0UH                 |             |
| C146                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FB131          | 1-469-185-11   | FERRITE 0UH                  |             |
| C148                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FB132          | 1-414-234-22   | INDUCTOR 0UH                 |             |
| C149                    | 1-163-227-11 | CERAMIC CHIP | 10PF 0.50PF 50V     | FB133          | 1-216-295-11   | SHORT 0                      |             |
| C150                    | 1-163-227-11 | CERAMIC CHIP | 10PF 0.50PF 50V     | FB134          | 1-216-295-11   | SHORT 0                      |             |
| C151                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FB136          | 1-500-451-11   | FERRITE 0UH                  |             |
| C152                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FB137          | 1-216-295-11   | SHORT 0                      |             |
| C153                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FB138          | 1-216-295-11   | SHORT 0                      |             |
| C154                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FB139          | 1-500-451-11   | FERRITE 0UH                  |             |
| C155                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | <FILTER>       |                |                              |             |
| C156                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FL101          | 1-239-899-21   | FILTER,CHIP EMI              |             |
| C157                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    | FL102          | 1-239-899-21   | FILTER,CHIP EMI              |             |
| C158                    | 1-163-021-91 | CERAMIC CHIP | 0.01UF 10.00% 50V   |                |                |                              |             |
| C159                    | 1-163-239-11 | CERAMIC CHIP | 33PF 5.00% 50V      |                |                |                              |             |
| C160                    | 1-163-239-11 | CERAMIC CHIP | 33PF 5.00% 50V      |                |                |                              |             |
| C161                    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V    |                |                |                              |             |
| C162                    | 1-124-778-00 | ELECT CHIP   | 22UF 20.00% 6.3V    |                |                |                              |             |

| Ref.No. | Part No.     | Description                 | Remark |      |       | Ref.No. | Part No.     | Description  | Remark   |              |          |       |    |       |
|---------|--------------|-----------------------------|--------|------|-------|---------|--------------|--------------|----------|--------------|----------|-------|----|-------|
| FL103   | 1-239-899-21 | FILTER,CHIP EMI             |        |      |       | R115    | 1-216-081-00 | RES-CHIP     | 22K      | 5%           | 1/10W    |       |    |       |
| FL104   | 1-239-899-21 | FILTER,CHIP EMI             |        |      |       | R116    | 1-216-081-00 | RES-CHIP     | 22K      | 5%           | 1/10W    |       |    |       |
| FL105   | 1-239-899-21 | FILTER,CHIP EMI             |        |      |       | R117    | 1-216-067-00 | RES-CHIP     | 5.6K     | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R118    | 1-216-657-11 | METAL CHIP   | 1.8K     | 0.5%         | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R119    | 1-216-624-11 | METAL CHIP   | 75       | 0.5%         | 1/10W    |       |    |       |
|         | <IC>         |                             |        |      |       | R120    | 1-216-091-00 | RES-CHIP     | 56K      | 5%           | 1/10W    |       |    |       |
| IC101   | 8-759-460-72 | IC BA033FP-E2               |        |      |       | R121    | 1-216-063-91 | RES-CHIP     | 3.9K     | 5%           | 1/10W    |       |    |       |
| IC102   | 8-759-460-72 | IC BA033FP-E2               |        |      |       | R122    | 1-216-067-00 | RES-CHIP     | 5.6K     | 5%           | 1/10W    |       |    |       |
| IC103   | 8-759-335-28 | IC TA78M09F (TE16L)         |        |      |       | R123    | 1-216-067-00 | RES-CHIP     | 5.6K     | 5%           | 1/10W    |       |    |       |
| IC104   | 8-759-157-17 | IC PQ05SZ1U                 |        |      |       | R124    | 1-216-077-91 | RES-CHIP     | 15K      | 5%           | 1/10W    |       |    |       |
| IC105   | 8-759-637-94 | IC LT1376IS#TR              |        |      |       |         |              |              |          |              |          |       |    |       |
| IC106   | 8-759-157-17 | IC PQ05SZ1U                 |        |      |       | R125    | 1-216-077-91 | RES-CHIP     | 15K      | 5%           | 1/10W    |       |    |       |
| IC107   | 8-759-066-55 | IC TA75W393FU-TE12R         |        |      |       | R127    | 1-216-121-11 | RES-CHIP     | 1M       | 5%           | 1/10W    |       |    |       |
| IC108   | 8-759-066-55 | IC TA75W393FU-TE12R         |        |      |       | R128    | 1-216-025-11 | RES-CHIP     | 100      | 5%           | 1/10W    |       |    |       |
| IC121   | 8-719-066-43 | DIODE GP1U28Y               |        |      |       | R129    | 1-216-049-11 | RES-CHIP     | 1K       | 5%           | 1/10W    |       |    |       |
| IC122   | 8-759-697-26 | IC RCV4-A1T-MASK-25         |        |      |       | R130    | 1-216-017-91 | RES-CHIP     | 47       | 5%           | 1/10W    |       |    |       |
| IC123   | 8-759-681-47 | IC IRMF-A0T-QTP             |        |      |       | R131    | 1-216-017-91 | RES-CHIP     | 47       | 5%           | 1/10W    |       |    |       |
| IC124   | 8-759-582-91 | IC S-80842ANNP-ED6-T2       |        |      |       | R133    | 1-216-091-00 | RES-CHIP     | 56K      | 5%           | 1/10W    |       |    |       |
| IC127   | 8-759-655-55 | IC UPD72012GB-003-3B4       |        |      |       | R134    | 1-216-091-00 | RES-CHIP     | 56K      | 5%           | 1/10W    |       |    |       |
| IC128   | 8-759-655-59 | IC UPD16875G-E2             |        |      |       | R135    | 1-216-073-00 | RES-CHIP     | 10K      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R136    | 1-216-073-00 | RES-CHIP     | 10K      | 5%           | 1/10W    |       |    |       |
|         | <JACK>       |                             |        |      |       | R137    | 1-216-025-11 | RES-CHIP     | 100      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R138    | 1-216-089-11 | RES-CHIP     | 47K      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R139    | 1-216-025-11 | RES-CHIP     | 100      | 5%           | 1/10W    |       |    |       |
| J101    | 1-794-014-11 | PIN,JACK                    |        |      |       | R140    | 1-216-025-11 | RES-CHIP     | 100      | 5%           | 1/10W    |       |    |       |
| J102    | 1-566-822-21 | JACK                        |        |      |       | R141    | 1-216-089-11 | RES-CHIP     | 47K      | 5%           | 1/10W    |       |    |       |
| J121    | 1-793-994-21 | CONNECTOR,USB (A)           |        |      |       |         |              |              |          |              |          |       |    |       |
| J122    | 1-779-677-11 | CONNECTOR,USB (B)           |        |      |       | R142    | 1-216-114-00 | RES-CHIP     | 510K     | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R143    | 1-216-073-00 | RES-CHIP     | 10K      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R144    | 1-216-025-11 | RES-CHIP     | 100      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R145    | 1-216-114-00 | RES-CHIP     | 510K     | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R146    | 1-216-073-00 | RES-CHIP     | 10K      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       |         |              |              |          |              |          |       |    |       |
| L101    | 1-500-451-11 | FERRITE                     | 0UH    |      |       |         | R147         | 1-216-065-91 | RES-CHIP | 4.7K         | 5%       | 1/10W |    |       |
| L102    | 1-412-363-21 | FERRITE                     | 0UH    |      |       |         | R148         | 1-216-077-91 | RES-CHIP | 15K          | 5%       | 1/10W |    |       |
| L103    | 1-412-363-21 | FERRITE                     | 0UH    |      |       |         | R149         | 1-216-077-91 | RES-CHIP | 15K          | 5%       | 1/10W |    |       |
| L104    | 1-412-363-21 | FERRITE                     | 0UH    |      |       |         | R152         | 1-216-053-00 | RES-CHIP | 1.5K         | 5%       | 1/10W |    |       |
| L105    | 1-412-363-21 | FERRITE                     | 0UH    |      |       |         | R153         | 1-216-121-11 | RES-CHIP | 1M           | 5%       | 1/10W |    |       |
| L106    | 1-412-363-21 | FERRITE                     | 0UH    |      |       |         | R154         | 1-216-085-00 | RES-CHIP | 33K          | 5%       | 1/10W |    |       |
| L107    | 1-412-363-21 | FERRITE                     | 0UH    |      |       |         | R155         | 1-216-073-00 | RES-CHIP | 10K          | 5%       | 1/10W |    |       |
| L108    | 1-409-529-41 | INDUCTOR                    | 10UH   |      |       |         | R156         | 1-216-025-11 | RES-CHIP | 100          | 5%       | 1/10W |    |       |
| L109    | 1-414-753-91 | INDUCTOR                    | 4.7UH  |      |       |         | R157         | 1-216-025-11 | RES-CHIP | 100          | 5%       | 1/10W |    |       |
| L131    | 1-216-295-11 | SHORT                       | 0      |      |       |         | R158         | 1-216-025-11 | RES-CHIP | 100          | 5%       | 1/10W |    |       |
|         | <TRANSISTOR> |                             |        |      |       | R159    | 1-216-025-11 | RES-CHIP     | 100      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R160    | 1-216-025-11 | RES-CHIP     | 100      | 5%           | 1/10W    |       |    |       |
| Q102    | 8-729-230-49 | TRANSISTOR 2SC2712-YG-TE85L |        |      |       | R161    | 1-216-049-11 | RES-CHIP     | 1K       | 5%           | 1/10W    |       |    |       |
| Q103    | 8-729-230-49 | TRANSISTOR 2SC2712-YG-TE85L |        |      |       | R162    | 1-216-097-11 | RES-CHIP     | 100K     | 5%           | 1/10W    |       |    |       |
| Q104    | 8-729-230-49 | TRANSISTOR 2SC2712-YG-TE85L |        |      |       | R163    | 1-216-097-11 | RES-CHIP     | 100K     | 5%           | 1/10W    |       |    |       |
| Q105    | 1-801-806-11 | TRANSISTOR DTC144EKA-T146   |        |      |       |         |              |              |          |              |          |       |    |       |
| Q106    | 1-801-806-11 | TRANSISTOR DTC144EKA-T146   |        |      |       | R164    | 1-216-085-00 | RES-CHIP     | 33K      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R165    | 1-216-089-11 | RES-CHIP     | 47K      | 5%           | 1/10W    |       |    |       |
| Q107    | 8-729-216-22 | TRANSISTOR 2SA1162-YG-TE85L |        |      |       | R166    | 1-216-091-00 | RES-CHIP     | 56K      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R167    | 1-216-083-00 | RES-CHIP     | 27K      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       | R168    | 1-216-073-00 | RES-CHIP     | 10K      | 5%           | 1/10W    |       |    |       |
|         |              |                             |        |      |       |         |              |              |          |              |          |       |    |       |
|         | <RESISTOR>   |                             |        |      |       | R170    | 1-216-005-00 | RES-CHIP     | 15       | 5%           | 1/10W    |       |    |       |
| R100    | 1-216-667-11 | METAL CHIP                  | 4.7K   | 0.5% | 1/10W | R171    | 1-216-005-00 | RES-CHIP     | 15       | 5%           | 1/10W    |       |    |       |
| R101    | 1-216-025-11 | RES-CHIP                    | 100    | 5%   | 1/10W | R172    | 1-216-005-00 | RES-CHIP     | 15       | 5%           | 1/10W    |       |    |       |
| R102    | 1-216-624-11 | METAL CHIP                  | 75     | 0.5% | 1/10W | R173    | 1-216-005-00 | RES-CHIP     | 15       | 5%           | 1/10W    |       |    |       |
| R103    | 1-216-624-11 | METAL CHIP                  | 75     | 0.5% | 1/10W | R174    | 1-216-005-00 | RES-CHIP     | 15       | 5%           | 1/10W    |       |    |       |
| R104    | 1-216-624-11 | METAL CHIP                  | 75     | 0.5% | 1/10W |         |              |              |          |              |          |       |    |       |
|         |              |                             |        |      |       | R175    | 1-216-005-00 | RES-CHIP     | 15       | 5%           | 1/10W    |       |    |       |
| R105    | 1-216-113-00 | RES-CHIP                    |        |      |       | 470K    | 5%           | 1/10W        | R176     | 1-216-005-00 | RES-CHIP | 15    | 5% | 1/10W |
| R106    | 1-216-113-00 | RES-CHIP                    |        |      |       | 470K    | 5%           | 1/10W        | R177     | 1-216-005-00 | RES-CHIP | 15    | 5% | 1/10W |
| R107    | 1-216-295-11 | SHORT                       |        |      |       | 0       |              |              | R178     | 1-216-005-00 | RES-CHIP | 15    | 5% | 1/10W |
| R108    | 1-216-049-11 | RES-CHIP                    |        |      |       | 1K      | 5%           | 1/10W        | R179     | 1-216-005-00 | RES-CHIP | 15    | 5% | 1/10W |
| R109    | 1-216-049-11 | RES-CHIP                    | 1K     | 5%   | 1/10W |         |              |              |          |              |          |       |    |       |
|         |              |                             |        |      |       | R180    | 1-216-005-00 | RES-CHIP     | 15       | 5%           | 1/10W    |       |    |       |
| R110    | 1-216-049-11 | RES-CHIP                    |        |      |       | 1K      | 5%           | 1/10W        | R181     | 1-216-005-00 | RES-CHIP | 15    | 5% | 1/10W |
| R111    | 1-216-081-00 | RES-CHIP                    |        |      |       | 22K     | 5%           | 1/10W        | R182     | 1-216-077-91 | RES-CHIP | 15K   | 5% | 1/10W |
| R112    | 1-216-081-00 | RES-CHIP                    |        |      |       | 22K     | 5%           | 1/10W        | R183     | 1-216-077-91 | RES-CHIP | 15K   | 5% | 1/10W |
| R113    | 1-216-081-00 | RES-CHIP                    |        |      |       | 22K     | 5%           | 1/10W        | R184     | 1-216-060-00 | RES-CHIP | 3K    | 5% | 1/10W |
| R114    | 1-216-081-00 | RES-CHIP                    | 22K    | 5%   | 1/10W |         |              |              |          |              |          |       |    |       |
|         |              |                             |        |      |       | R185    | 1-216-060-00 | RES-CHIP     | 3K       | 5%           | 1/10W    |       |    |       |

| Ref.No.                                 | Part No.       | Description         | Remark   |        |       | Ref.No.       | Part No.       | Description                   | Remark |        |     |
|---|----------------|---------------------|----------|--------|-------|---------------|----------------|-------------------------------|--------|--------|-----|
| R186                                    | 1-216-097-11   | RES-CHIP            | 100K     | 5%     | 1/10W | C673          | 1-115-339-11   | CERAMIC CHIP                  | 0.1UF  | 10.00% | 50V |
| R187                                    | 1-216-097-11   | RES-CHIP            | 100K     | 5%     | 1/10W | C674          | 1-126-786-11   | ELECT                         | 47UF   | 20.00% | 16V |
| R189                                    | 1-216-295-11   | SHORT               | 0        |        |       | C676          | 1-126-382-11   | ELECT                         | 100UF  | 20.00% | 16V |
| R192                                    | 1-216-073-00   | RES-CHIP            | 10K      | 5%     | 1/10W |               |                |                               |        |        |     |
| R193                                    | 1-216-053-00   | RES-CHIP            | 1.5K     | 5%     | 1/10W | C677          | 1-115-339-11   | CERAMIC CHIP                  | 0.1UF  | 10.00% | 50V |
| R194                                    | 1-216-025-11   | RES-CHIP            | 100      | 5%     | 1/10W | C678          | 1-115-339-11   | CERAMIC CHIP                  | 0.1UF  | 10.00% | 50V |
| R195                                    | 1-216-057-00   | RES-CHIP            | 2.2K     | 5%     | 1/10W | C679          | 1-126-796-11   | ELECT                         | 22UF   | 20.00% | 35V |
| R197                                    | 1-216-073-00   | RES-CHIP            | 10K      | 5%     | 1/10W | C680          | 1-115-339-11   | CERAMIC CHIP                  | 0.1UF  | 10.00% | 50V |
| R198                                    | 1-216-053-00   | RES-CHIP            | 1.5K     | 5%     | 1/10W | C681          | 1-115-784-11   | ELECT                         | 270UF  | 20.00% | 25V |
| R199                                    | 1-216-073-00   | RES-CHIP            | 10K      | 5%     | 1/10W |               |                |                               |        |        |     |
| <SWITCH>                                |                |                     |          |        |       | C682          | 1-115-339-11   | CERAMIC CHIP                  | 0.1UF  | 10.00% | 50V |
| S101                                    | 1-762-984-11   | SWITCH,PUSH         |          |        |       | C683          | 1-115-339-11   | CERAMIC CHIP                  | 0.1UF  | 10.00% | 50V |
| S202                                    | 1-771-897-11   | SWITCH,MICRO        |          |        |       | C684          | 1-124-589-11   | ELECT                         | 47UF   | 20.00% | 16V |
| <CRYSTAL>                               |                |                     |          |        |       | C718          | 1-115-339-11   | CERAMIC CHIP                  | 0.1UF  | 10.00% | 50V |
| X101                                    | 1-781-163-11   | VIBRATOR,OSCILLATOR |          |        |       | C719          | 1-126-789-11   | ELECT                         | 33UF   | 20.00% | 25V |
| X102                                    | 1-767-340-11   | VIBRATOR,CRYSTAL    |          |        |       |               |                |                               |        |        |     |
| X103                                    | 1-781-163-11   | VIBRATOR,OSCILLATOR |          |        |       |               |                |                               |        |        |     |
| *****                                   |                |                     |          |        |       |               |                |                               |        |        |     |
| * A-1316-546-A GA COMPL                 |                |                     |          |        |       | <CONNECTOR>   |                |                               |        |        |     |
| *****                                   |                |                     |          |        |       | CN601         | * 1-691-960-11 | PIN,CONNECTOR (PC BOARD) 3P   |        |        |     |
| * 4-074-436-01 INSULATION PLATE (B)     |                |                     |          |        |       | CN605         | * 1-564-720-11 | PIN,CONNECTOR (SMALL TYPE) 4P |        |        |     |
| * 4-074-437-01 INSULATION PLATE (A)     |                |                     |          |        |       | CN606         | * 1-774-249-11 | CONNECTOR,BOARD TO BOARD 10P  |        |        |     |
| * 4-374-846-01 COVER,CAPACITOR,CAP TYPE |                |                     |          |        |       | CN674         | 1-564-721-11   | PIN,CONNECTOR (SMALL TYPE) 5P |        |        |     |
| 4-382-854-01 SCREW (M3X8),P,SW (+)      |                |                     |          |        |       | CN675         | * 1-564-705-11 | PIN,CONNECTOR (SMALL TYPE) 3P |        |        |     |
| <CAPACITOR>                             |                |                     |          |        |       | CN676         | * 1-564-719-11 | PIN,CONNECTOR (SMALL TYPE) 3P |        |        |     |
| C601                                    | △ 1-113-907-51 | CERAMIC             | 0.0022UF | 20.00% | 250V  | <DIODE>       |                |                               |        |        |     |
| C602                                    | △ 1-115-166-11 | FILM                | 0.22UF   | 20.00% | 275V  | D601          | △ 8-719-066-75 | DIODE D6SB80                  |        |        |     |
| C603                                    | △ 1-113-907-51 | CERAMIC             | 0.0022UF | 20.00% | 250V  | D602          | 8-719-060-06   | DIODE FSF10A60                |        |        |     |
| C604                                    | 1-135-449-11   | ELECT               | 220UF    | 20%    | 450V  | D603          | 8-719-055-30   | DIODE D1FS4A-TA               |        |        |     |
| C608                                    | 1-107-906-11   | ELECT               | 10UF     | 20.00% | 50V   | D604          | 8-719-055-30   | DIODE D1FS4A-TA               |        |        |     |
| C609                                    | 1-107-792-11   | CERAMIC             | 100PF    | 5.00%  | 1KV   | D605          | 8-719-066-76   | DIODE TF861S                  |        |        |     |
| C610                                    | 1-129-720-00   | FILM                | 0.033UF  | 5.00%  | 630V  |               |                |                               |        |        |     |
| C611                                    | 1-115-785-91   | ELECT               | 470UF    | 20.00% | 25V   | D606          | 8-719-110-53   | DIODE RD20ES-T1B2             |        |        |     |
| C612                                    | 1-107-889-11   | ELECT               | 220UF    | 20.00% | 25V   | D607          | 8-719-059-23   | DIODE P6KE200AG23             |        |        |     |
| C615                                    | 1-115-339-11   | CERAMIC CHIP        | 0.1UF    | 10.00% | 50V   | D608          | 8-719-961-04   | DIODE RGP10J                  |        |        |     |
| C617                                    | 1-107-888-11   | ELECT               | 47UF     | 20.00% | 25V   | D609          | 8-719-510-41   | DIODE D10SC9M                 |        |        |     |
| C618                                    | 1-115-339-11   | CERAMIC CHIP        | 0.1UF    | 10.00% | 50V   | D610          | 8-719-300-33   | DIODE RGP10G                  |        |        |     |
| C619                                    | 1-130-202-00   | FILM                | 0.022UF  | 5.00%  | 400V  |               |                |                               |        |        |     |
| C620                                    | 1-115-742-11   | ELECT               | 0.0027F  | 20.00% | 10V   | D611          | 8-719-071-97   | DIODE P6KE350AG23             |        |        |     |
| C621                                    | 1-115-339-11   | CERAMIC CHIP        | 0.1UF    | 10.00% | 50V   | D612          | 8-719-106-31   | DIODE RD8.2M-T1B1             |        |        |     |
| C623                                    | 1-107-909-11   | ELECT               | 47UF     | 20.00% | 16V   | D613          | 8-719-071-97   | DIODE P6KE350AG23             |        |        |     |
| C624                                    | 1-115-339-11   | CERAMIC CHIP        | 0.1UF    | 10.00% | 50V   | D614          | 8-719-073-37   | DIODE P6KE300AG23             |        |        |     |
| C625                                    | 1-115-339-11   | CERAMIC CHIP        | 0.1UF    | 10.00% | 50V   | D615          | 8-719-053-50   | DIODE FCQ20A06                |        |        |     |
| C626                                    | 1-163-003-11   | CERAMIC CHIP        | 330PF    | 10.00% | 50V   |               |                |                               |        |        |     |
| C627                                    | 1-115-340-11   | CERAMIC CHIP        | 0.22UF   | 10.00% | 25V   | D616          | 8-719-051-96   | DIODE FMG-G2CS                |        |        |     |
| C628                                    | 1-165-319-11   | CERAMIC CHIP        | 0.1UF    |        | 50V   | D617          | 8-719-053-50   | DIODE FCQ20A06                |        |        |     |
| C629                                    | 1-107-888-11   | ELECT               | 47UF     | 20.00% | 25V   | D618          | 8-719-071-97   | DIODE P6KE350AG23             |        |        |     |
| C631                                    | 1-163-113-00   | CERAMIC CHIP        | 68PF     | 5.00%  | 50V   | D619          | 8-719-106-31   | DIODE RD8.2M-T1B1             |        |        |     |
| C632                                    | 1-164-492-11   | CERAMIC CHIP        | 0.15UF   | 10.00% | 16V   | D620          | 8-719-071-97   | DIODE P6KE350AG23             |        |        |     |
| C633                                    | 1-163-133-00   | CERAMIC CHIP        | 470PF    | 5.00%  | 50V   |               |                |                               |        |        |     |
| C634                                    | 1-163-009-11   | CERAMIC CHIP        | 0.001UF  | 10.00% | 50V   | D621          | 8-719-055-33   | DIODE D1FL20U-TA              |        |        |     |
| C635                                    | 1-163-021-91   | CERAMIC CHIP        | 0.01UF   | 10.00% | 50V   | D622          | 8-719-157-76   | DIODE RD24M-T1B               |        |        |     |
| C636                                    | 1-126-795-11   | ELECT               | 10UF     | 20.00% | 50V   | D672          | 8-719-914-43   | DIODE DAN202K-T-146           |        |        |     |
| C637                                    | △ 1-113-511-11 | FILM                | 0.47UF   | 20.00% | 275V  | D673          | 8-719-055-30   | DIODE D1FS4A-TA               |        |        |     |
| C638                                    | 1-117-228-11   | MYLAR               | 2.2UF    | 10.00% | 450V  | D674          | 8-719-055-30   | DIODE D1FS4A-TA               |        |        |     |
| C671                                    | 1-163-021-91   | CERAMIC CHIP        | 0.01UF   | 10.00% | 50V   |               |                |                               |        |        |     |
| C672                                    | 1-126-795-11   | ELECT               | 10UF     | 20.00% | 50V   | D675          | 8-719-055-30   | DIODE D1FS4A-TA               |        |        |     |
| <FUSE>                                  |                |                     |          |        |       | <FUSE HOLDER> |                |                               |        |        |     |
| C628                                    | 1-165-319-11   | CERAMIC CHIP        | 0.1UF    |        | 50V   | F601          | △ 1-576-233-11 | FUSE (H.B.C.) 6.3A/250V       |        |        |     |
| C629                                    | 1-107-888-11   | ELECT               | 47UF     | 20.00% | 25V   |               |                |                               |        |        |     |
| C631                                    | 1-163-113-00   | CERAMIC CHIP        | 68PF     | 5.00%  | 50V   | <IC>          |                |                               |        |        |     |
| C632                                    | 1-164-492-11   | CERAMIC CHIP        | 0.15UF   | 10.00% | 16V   | IC602         | 8-759-388-23   | IC TL431BCDR2                 |        |        |     |
| C633                                    | 1-163-133-00   | CERAMIC CHIP        | 470PF    | 5.00%  | 50V   | IC603         | 8-759-487-72   | IC TOP222Y-BB                 |        |        |     |
| C634                                    | 1-163-009-11   | CERAMIC CHIP        | 0.001UF  | 10.00% | 50V   | IC604         | 8-759-470-64   | IC TOP223Y-BB                 |        |        |     |
| C635                                    | 1-163-021-91   | CERAMIC CHIP        | 0.01UF   | 10.00% | 50V   |               |                |                               |        |        |     |
| C636                                    | 1-126-795-11   | ELECT               | 10UF     | 20.00% | 50V   |               |                |                               |        |        |     |
| C637                                    | △ 1-113-511-11 | FILM                | 0.47UF   | 20.00% | 275V  |               |                |                               |        |        |     |
| C638                                    | 1-117-228-11   | MYLAR               | 2.2UF    | 10.00% | 450V  |               |                |                               |        |        |     |

| Ref.No.         | Part No.       | Description                 | Remark |       |  |  | Ref.No.       | Part No.       | Description                 | Remark |      |       |  |
|-----------------|----------------|-----------------------------|--------|-------|--|--|---------------|----------------|-----------------------------|--------|------|-------|--|
| IC605           | 8-759-696-20   | IC FA5332M-TE1              |        |       |  |  | R636          | 1-216-085-00   | RES-CHIP                    | 33K    | 5%   | 1/10W |  |
| IC671           | 8-759-388-23   | IC TL431BCDR2               |        |       |  |  | R637          | 1-216-101-00   | RES-CHIP                    | 150K   | 5%   | 1/10W |  |
|                 |                |                             |        |       |  |  | R638          | 1-216-073-00   | RES-CHIP                    | 10K    | 5%   | 1/10W |  |
| IC672           | 8-759-533-85   | IC BA05FP-E2                |        |       |  |  | R639          | 1-216-667-11   | METAL CHIP                  | 4.7K   | 0.5% | 1/10W |  |
| IC673           | 8-759-650-39   | IC LT1374IS8#TR             |        |       |  |  | R640          | 1-216-659-11   | METAL CHIP                  | 2.2K   | 0.5% | 1/10W |  |
| IC704           | 8-759-098-24   | IC PQ30RV11                 |        |       |  |  | R641          | 1-216-655-11   | METAL CHIP                  | 1.5K   | 0.5% | 1/10W |  |
| <COIL>          |                |                             |        |       |  |  | R642          | 1-220-333-11   | RES-CHIP                    | 120K   | 5%   | 1/2W  |  |
|                 |                |                             |        |       |  |  | R643          | 1-220-335-11   | RES-CHIP                    | 180K   | 5%   | 1/2W  |  |
| L601            | △ 1-431-419-11 | TRANSFORMER,LINE FILTER     |        |       |  |  | R644          | 1-220-336-11   | RES-CHIP                    | 220K   | 5%   | 1/2W  |  |
| L602            | 1-416-754-21   | INDUCTOR 0UH                |        |       |  |  | R645          | 1-220-335-11   | RES-CHIP                    | 180K   | 5%   | 1/2W  |  |
| L603            | 1-406-976-11   | INDUCTOR 68UH               |        |       |  |  | R646          | 1-220-333-11   | RES-CHIP                    | 120K   | 5%   | 1/2W  |  |
| L604            | 1-413-090-31   | INDUCTOR 110UH              |        |       |  |  | R647          | 1-220-335-11   | RES-CHIP                    | 180K   | 5%   | 1/2W  |  |
| L671            | 1-406-663-21   | INDUCTOR 47UH               |        |       |  |  | R648          | 1-216-075-00   | RES-CHIP                    | 12K    | 5%   | 1/10W |  |
| <PHOTO COUPLER> |                |                             |        |       |  |  | R649          | 1-216-025-11   | RES-CHIP                    | 100    | 5%   | 1/10W |  |
|                 |                |                             |        |       |  |  | R650          | 1-216-005-00   | RES-CHIP                    | 15     | 5%   | 1/10W |  |
|                 |                |                             |        |       |  |  | R651          | 1-216-687-11   | METAL CHIP                  | 33K    | 0.5% | 1/10W |  |
| PH601           | 8-749-010-64   | PHOTO COUPLER PC123FY2      |        |       |  |  | R652          | 1-216-689-11   | RES-CHIP                    | 39K    | 5%   | 1/10W |  |
| PH602           | 8-749-010-64   | PHOTO COUPLER PC123FY2      |        |       |  |  | R653          | 1-216-065-91   | RES-CHIP                    | 4.7K   | 5%   | 1/10W |  |
| PH603           | 8-749-010-64   | PHOTO COUPLER PC123FY2      |        |       |  |  | R654          | 1-216-667-11   | METAL CHIP                  | 4.7K   | 0.5% | 1/10W |  |
|                 |                |                             |        |       |  |  | R655          | 1-216-667-11   | METAL CHIP                  | 4.7K   | 0.5% | 1/10W |  |
| <IC LINK>       |                |                             |        |       |  |  | R656          | 1-220-335-11   | RES-CHIP                    | 180K   | 5%   | 1/2W  |  |
|                 |                |                             |        |       |  |  | R657          | 1-220-333-11   | RES-CHIP                    | 120K   | 5%   | 1/2W  |  |
| PS601           | △ 1-576-124-21 | LINK,IC (2A)                |        |       |  |  | R671          | 1-216-603-11   | METAL CHIP                  | 10     | 0.5% | 1/10W |  |
|                 |                |                             |        |       |  |  | R672          | 1-216-077-91   | RES-CHIP                    | 15K    | 5%   | 1/10W |  |
| <TRANSISTOR>    |                |                             |        |       |  |  | R673          | 1-220-270-11   | RES-CHIP                    | 390    | 5%   | 1/2W  |  |
|                 |                |                             |        |       |  |  | R674          | 1-220-267-11   | RES-CHIP                    | 180    | 5%   | 1/2W  |  |
| Q601            | 8-729-043-15   | TRANSISTOR 2SK3013F-02      |        |       |  |  | R675          | 1-216-691-11   | METAL CHIP                  | 47K    | 0.5% | 1/10W |  |
| Q602            | 8-729-922-39   | TRANSISTOR 2SD2144S-TP-V    |        |       |  |  | R676          | 1-216-671-11   | METAL CHIP                  | 6.8K   | 0.5% | 1/10W |  |
| Q603            | 8-729-230-49   | TRANSISTOR 2SC2712-YG-TE85L |        |       |  |  | R677          | 1-216-085-00   | RES-CHIP                    | 33K    | 5%   | 1/10W |  |
| Q604            | 8-729-230-49   | TRANSISTOR 2SC2712-YG-TE85L |        |       |  |  | R678          | 1-216-093-91   | RES-CHIP                    | 68K    | 5%   | 1/10W |  |
| Q671            | 8-729-230-49   | TRANSISTOR 2SC2712-YG-TE85L |        |       |  |  | R679          | 1-216-667-11   | METAL CHIP                  | 4.7K   | 0.5% | 1/10W |  |
|                 |                |                             |        |       |  |  | R680          | 1-216-049-11   | RES-CHIP                    | 1K     | 5%   | 1/10W |  |
| Q672            | 8-729-230-49   | TRANSISTOR 2SC2712-YG-TE85L |        |       |  |  | R681          | 1-216-025-11   | RES-CHIP                    | 100    | 5%   | 1/10W |  |
| Q673            | 8-729-230-49   | TRANSISTOR 2SC2712-YG-TE85L |        |       |  |  | R682          | 1-216-073-00   | RES-CHIP                    | 10K    | 5%   | 1/10W |  |
| <RESISTOR>      |                |                             |        |       |  |  | R683          | 1-216-025-11   | RES-CHIP                    | 100    | 5%   | 1/10W |  |
|                 |                |                             |        |       |  |  | R686          | 1-216-089-11   | RES-CHIP                    | 47K    | 5%   | 1/10W |  |
| R601            | △ 1-202-882-91 | SOLID 560K                  | 20%    | 1/2W  |  |  | R687          | 1-216-075-00   | RES-CHIP                    | 12K    | 5%   | 1/10W |  |
| R602            | 1-216-003-11   | RES-CHIP 12                 | 5%     | 1/10W |  |  | R688          | 1-216-073-00   | RES-CHIP                    | 10K    | 5%   | 1/10W |  |
| R603            | 1-216-077-91   | RES-CHIP 15K                | 5%     | 1/10W |  |  | R689          | 1-216-081-00   | RES-CHIP                    | 22K    | 5%   | 1/10W |  |
| R604            | 1-219-363-11   | FUSIBLE 5.6                 | 5%     | 5W    |  |  | R694          | 1-216-081-00   | RES-CHIP                    | 22K    | 5%   | 1/10W |  |
| R605            | 1-217-156-00   | RESISTOR 0.22               | 10%    | 5W    |  |  | R696          | 1-216-675-91   | METAL CHIP                  | 10K    | 0.5% | 1/10W |  |
|                 |                |                             |        |       |  |  | R697          | 1-216-697-91   | METAL CHIP                  | 82K    | 0.5% | 1/10W |  |
| R606            | 1-260-324-11   | CARBON 470                  | 5%     | 1/2W  |  |  | R698          | 1-216-677-11   | METAL CHIP                  | 12K    | 0.5% | 1/10W |  |
| R607            | 1-216-097-11   | RES-CHIP 100K               | 5%     | 1/10W |  |  | R699          | 1-216-695-11   | METAL CHIP                  | 68K    | 0.5% | 1/10W |  |
| R608            | 1-249-429-11   | CARBON 10K                  | 5%     | 1/4W  |  |  | R700          | 1-216-659-11   | METAL CHIP                  | 2.2K   | 0.5% | 1/10W |  |
| R609            | 1-249-389-11   | CARBON 4.7                  | 5%     | 1/4W  |  |  |               |                |                             |        |      |       |  |
| R610            | 1-215-903-11   | METAL OXIDE 68K             | 5%     | 2W    |  |  | R701          | 1-216-667-11   | METAL CHIP                  | 4.7K   | 0.5% | 1/10W |  |
|                 |                |                             |        |       |  |  | R716          | 1-216-683-11   | METAL CHIP                  | 22K    | 0.5% | 1/10W |  |
| R611            | 1-220-270-11   | RES-CHIP 390                | 5%     | 1/2W  |  |  | R717          | 1-216-675-91   | METAL CHIP                  | 10K    | 0.5% | 1/10W |  |
| R613            | 1-249-389-11   | CARBON 4.7                  | 5%     | 1/4W  |  |  | R718          | 1-216-665-11   | METAL CHIP                  | 3.9K   | 0.5% | 1/10W |  |
| R615            | 1-216-671-11   | METAL CHIP 6.8K             | 0.5%   | 1/10W |  |  | R719          | 1-216-665-11   | METAL CHIP                  | 3.9K   | 0.5% | 1/10W |  |
| R617            | 1-220-337-11   | RES-CHIP 270K               | 5%     | 1/2W  |  |  |               |                |                             |        |      |       |  |
| R618            | 1-216-667-11   | METAL CHIP 4.7K             | 0.5%   | 1/10W |  |  |               |                |                             |        |      |       |  |
|                 |                |                             |        |       |  |  |               |                |                             |        |      |       |  |
| R620            | 1-216-033-00   | RES-CHIP 220                | 5%     | 1/10W |  |  | <TRANSFORMER> |                |                             |        |      |       |  |
| R621            | 1-216-311-00   | RES-CHIP 6.8                | 5%     | 1/10W |  |  |               |                |                             |        |      |       |  |
| R622            | 1-220-267-11   | RES-CHIP 180                | 5%     | 1/2W  |  |  | T601          | △ 1-435-199-11 | TRANSFORMER,CONVERTER (SRT) |        |      |       |  |
| R623            | 1-216-049-11   | RES-CHIP 1K                 | 5%     | 1/10W |  |  | T602          | △ 1-435-198-11 | TRANSFORMER,CONVERTER (PIT) |        |      |       |  |
| R625            | 1-220-337-11   | RES-CHIP 270K               | 5%     | 1/2W  |  |  |               |                |                             |        |      |       |  |
|                 |                |                             |        |       |  |  |               |                |                             |        |      |       |  |
| R626            | 1-216-075-00   | RES-CHIP 12K                | 5%     | 1/10W |  |  | <VARISTOR>    |                |                             |        |      |       |  |
| R627            | 1-216-025-11   | RES-CHIP 100                | 5%     | 1/10W |  |  |               |                |                             |        |      |       |  |
| R628            | 1-216-689-11   | RES-CHIP 39K                | 5%     | 1/10W |  |  | VD602         | △ 1-801-073-41 | VARISTOR ERZV14D471         |        |      |       |  |
| R629            | 1-215-927-00   | METAL OXIDE 47K             | 5%     | 3W    |  |  | VD604         | 1-803-136-11   | VARISTOR ZP2600             |        |      |       |  |
| R630            | 1-215-927-00   | METAL OXIDE 47K             | 5%     | 3W    |  |  |               |                |                             |        |      |       |  |
|                 |                |                             |        |       |  |  |               |                |                             |        |      |       |  |
| R631            | 1-216-311-00   | RES-CHIP 6.8                | 5%     | 1/10W |  |  |               |                |                             |        |      |       |  |
| R632            | 1-216-049-11   | RES-CHIP 1K                 | 5%     | 1/10W |  |  |               |                |                             |        |      |       |  |
| R633            | 1-216-033-00   | RES-CHIP 220                | 5%     | 1/10W |  |  |               |                |                             |        |      |       |  |
| R634            | 1-216-629-11   | METAL CHIP 120              | 0.5%   | 1/10W |  |  |               |                |                             |        |      |       |  |
| R635            | 1-216-053-00   | RES-CHIP 1.5K               | 5%     | 1/10W |  |  |               |                |                             |        |      |       |  |

| Ref.No.                                       | Part No.       | Description                   | Remark   |        |       | Ref.No.     | Part No.     | Description  | Remark  |        |      |
|---|----------------|-------------------------------|----------|--------|-------|-------------|--------------|--------------|---------|--------|------|
| *****   |                |                               |          |        |       | C808        | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
| * A-1311-887-A GB MOUNT<br>*****              |                |                               |          |        |       | C810        | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
|   |                |                               |          |        |       | C813        | 1-124-779-00 | ELECT CHIP   | 10UF    | 20.00% | 16V  |
|   |                |                               |          |        |       | C814        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|   |                |                               |          |        |       | C816        | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
|   |                |                               |          |        |       | <CAPACITOR> |              |              |         |        |      |
| C701  | 1-115-339-11   | CERAMIC CHIP                  | 0.1UF    | 10.00% | 50V   | C820        | 1-124-779-00 | ELECT CHIP   | 10UF    | 20.00% | 16V  |
| C702  | 1-126-789-11   | ELECT                         | 33UF     | 20.00% | 25V   | C821        | 1-115-340-11 | CERAMIC CHIP | 0.22UF  | 10.00% | 25V  |
| C740  | 1-117-354-91   | ELECT                         | 330UF    | 20.00% | 35V   | C822        | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
| C742  | 1-117-316-91   | ELECT                         | 470UF    | 20.00% | 25V   | C824        | 1-115-340-11 | CERAMIC CHIP | 0.22UF  | 10.00% | 25V  |
| C772  | 1-163-011-11   | CERAMIC CHIP                  | 0.0015UF | 10.00% | 50V   | C826        | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
| C773  | 1-163-011-11   | CERAMIC CHIP                  | 0.0015UF | 10.00% | 50V   | C829        | 1-124-779-00 | ELECT CHIP   | 10UF    | 20.00% | 16V  |
| C776  | 1-126-786-11   | ELECT                         | 47UF     | 20.00% | 16V   | C830        | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
| C777  | 1-124-589-11   | ELECT                         | 47UF     | 20.00% | 16V   | C831        | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
| C778  | 1-107-882-91   | ELECT                         | 100UF    | 20.00% | 16V   | C832        | 1-126-391-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
| <CONNECTOR>                                   |                |                               |          |        |       | C833        | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10%    | 6.3V |
| CN702   | * 1-774-246-11 | CONNECTOR,BOARD TO BOARD 10P  |          |        |       | C834        | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
| CN706   | * 1-564-710-11 | PIN,CONNECTOR (SMALL TYPE) 8P |          |        |       | C839        | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
| CN707   | * 1-564-711-11 | PIN,CONNECTOR (SMALL TYPE) 9P |          |        |       | C840        | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% | 25V  |
| <DIODE>                                       |                |                               |          |        |       | C841        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| D715  | 8-719-510-41   | DIODE D10SC9M                 |          |        |       | C848        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| D727  | 8-719-073-52   | DIODE D2FS6-TA                |          |        |       | C849        | 1-107-826-11 | CERAMICCHIP  | 0.1UF   | 10.00% | 16V  |
| D728  | 8-719-073-52   | DIODE D2FS6-TA                |          |        |       | C850        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| D736  | 8-719-110-36   | DIODE RD13ES-T1B2             |          |        |       | C851        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| <IC>  |                |                               |          |        |       | C852        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| IC701   | 8-759-098-24   | IC PQ30RV11                   |          |        |       | C853        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| <COIL>  |                |                               |          |        |       | C854        | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10%    | 6.3V |
| L702  | 1-406-977-61   | INDUCTOR                      | 100UH    |        |       | C855        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| L703  | 1-416-208-11   | INDUCTOR                      | 150UH    |        |       | C856        | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10%    | 6.3V |
| L707  | 1-412-525-31   | INDUCTOR                      | 10UH     |        |       | C857        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| <TRANSISTOR>                                  |                |                               |          |        |       | C858        | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
| Q710  | 8-729-807-51   | TRANSISTOR 2SC2873Y-TE12L     |          |        |       | C859        | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10%    | 6.3V |
| <RESISTOR>                                    |                |                               |          |        |       | C860        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R706  | 1-216-653-11   | METAL CHIP                    | 1.2K     | 0.5%   | 1/10W | C863        | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10%    | 6.3V |
| R707  | 1-216-679-11   | METAL CHIP                    | 15K      | 0.5%   | 1/10W | C864        | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10%    | 6.3V |
| R776  | 1-220-221-11   | RES-CHIP                      | 100      | 5%     | 1/2W  | C865        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R777  | 1-220-221-11   | RES-CHIP                      | 100      | 5%     | 1/2W  | C866        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R784  | 1-218-235-11   | RES-CHIP                      | 82       | 5%     | 1/2W  | C867        | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10%    | 6.3V |
| R785  | 1-220-274-11   | RES-CHIP                      | 1.2K     | 5%     | 1/2W  | C868        | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10%    | 6.3V |
| R787  | 1-220-274-11   | RES-CHIP                      | 1.2K     | 5%     | 1/2W  | C869        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R788  | 1-220-274-11   | RES-CHIP                      | 1.2K     | 5%     | 1/2W  | C870        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| R789  | 1-220-274-11   | RES-CHIP                      | 1.2K     | 5%     | 1/2W  | C871        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| <CAPACITOR>                                   |                |                               |          |        |       | C872        | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10%    | 6.3V |
| C801  | 1-117-681-11   | ELECT CHIP                    | 100UF    | 20.00% | 16V   | C873        | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
| C802  | 1-128-400-11   | ELECT CHIP                    | 47UF     | 20.00% | 25V   | C874        | 1-164-004-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 25V  |
| C803  | 1-128-400-11   | ELECT CHIP                    | 47UF     | 20.00% | 25V   | C875        | 1-164-004-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 25V  |
| C804  | 1-128-400-11   | ELECT CHIP                    | 47UF     | 20.00% | 25V   | C876        | 1-164-004-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 25V  |
| C805  | 1-135-346-21   | ELECT                         | 39UF     | 20%    | 16V   | C877        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| *****   |                |                               |          |        |       | C879        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| * A-1335-133-A C COMPL (For VPL-CS2)<br>***** |                |                               |          |        |       | C880        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|   |                |                               |          |        |       | C881        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|   |                |                               |          |        |       | C882        | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
|   |                |                               |          |        |       | C883        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
|   |                |                               |          |        |       | C885        | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V  |
| <CAPACITOR>                                   |                |                               |          |        |       | C886        | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V  |
| C801  | 1-117-681-11   | ELECT CHIP                    | 100UF    | 20.00% | 16V   | C887        | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% | 6.3V |
| C802  | 1-128-400-11   | ELECT CHIP                    | 47UF     | 20.00% | 25V   | C888        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C803  | 1-128-400-11   | ELECT CHIP                    | 47UF     | 20.00% | 25V   | C889        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C804  | 1-128-400-11   | ELECT CHIP                    | 47UF     | 20.00% | 25V   | C890        | 1-117-370-11 | CERAMIC CHIP | 10UF    | 10V    |      |
| C805  | 1-135-346-21   | ELECT                         | 39UF     | 20%    | 16V   | C893        | 1-164-004-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 25V  |
| <CAPACITOR>                                   |                |                               |          |        |       | C894        | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% | 50V  |
| C801  | 1-117-681-11   | ELECT CHIP                    | 100UF    | 20.00% | 16V   | C895        | 1-128-400-11 | ELECT CHIP   | 47UF    | 20.00% | 25V  |
| C802  | 1-128-400-11   | ELECT CHIP                    | 47UF     | 20.00% | 25V   | C896        | 1-162-919-11 | CERAMIC CHIP | 22PF    | 5.00%  | 50V  |
| C803  | 1-128-400-11   | ELECT CHIP                    | 47UF     | 20.00% | 25V   | C897        | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 16V  |
| C804  | 1-128-400-11   | ELECT CHIP                    | 47UF     | 20.00% | 25V   | C900        | 1-164-004-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 25V  |
| C805  | 1-135-346-21   | ELECT                         | 39UF     | 20%    | 16V   | C901        | 1-164-004-11 | CERAMIC CHIP | 0.1UF   | 10.00% | 25V  |

| Ref.No. | Part No.     | Description  | Remark             | Ref.No. | Part No.       | Description                  | Remark           |
|---------|--------------|--------------|--------------------|---------|----------------|------------------------------|------------------|
| C902    | 1-128-400-11 | ELECT CHIP   | 47UF 20.00% 25V    | C1032   | 1-107-826-11   | CERAMIC CHIP                 | 0.1UF 10.00% 16V |
| C903    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | C1039   | 1-126-391-11   | ELECT CHIP                   | 47UF 20.00% 6.3V |
| C904    | 1-117-681-11 | ELECT CHIP   | 100UF 20.00% 16V   | C1041   | 1-125-889-91   | CERAMIC CHIP                 | 2.2UF 10% 10V    |
| C906    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   |         |                |                              |                  |
| C908    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   |         |                | <CONNECTOR>                  |                  |
| C909    | 1-164-005-11 | CERAMIC CHIP | 0.47UF 25V         | CN801   | * 1-691-551-11 | PIN,CONNECTOR (SMD) 8P       |                  |
| C951    | 1-113-985-11 | TANTAL.CHIP  | 10UF 20.00% 20V    | CN802   | * 1-580-055-21 | PIN,CONNECTOR (SMD) 2P       |                  |
| C952    | 1-113-985-11 | TANTAL.CHIP  | 10UF 20.00% 20V    | CN803   | * 1-580-056-21 | PIN,CONNECTOR (SMD) 3P       |                  |
| C953    | 1-126-394-11 | ELECT CHIP   | 10UF 20.00% 16V    | CN804   | * 1-569-775-21 | PIN,CONNECTOR (SMD) 5P       |                  |
| C954    | 1-163-021-91 | CERAMIC CHIP | 0.01UF 10.00% 50V  | CN805   | * 1-764-007-11 | PIN,CONNECTOR (SMD) 12P      |                  |
| C955    | 1-126-396-11 | ELECT CHIP   | 47UF 20.00% 16V    | CN806   | * 1-569-775-21 | PIN,CONNECTOR (SMD) 5P       |                  |
| C956    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | CN807   | * 1-580-789-21 | PIN,CONNECTOR (SMD) 6P       |                  |
| C957    | 1-125-827-91 | CERAMIC CHIP | 1UF 10.00% 25V     | CN808   | * 1-785-306-21 | CONNECTOR,BOARD TO BOARD70P  |                  |
| C958    | 1-125-827-91 | CERAMIC CHIP | 1UF 10.00% 25V     | CN809   | * 1-793-798-21 | CONNECTOR,BOARD TO BOARD 50P |                  |
| C959    | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10.00% 25V  | CN810   | * 1-691-551-11 | PIN,CONNECTOR (SMD) 8P       |                  |
| C960    | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10.00% 25V  | CN811   | 1-779-730-11   | CONNECTOR,FFC/FPC (ZIF) 24P  |                  |
| C961    | 1-104-915-11 | TANTAL.CHIP  | 2.2UF 20.00% 20V   | CN815   | * 1-580-055-21 | PIN,CONNECTOR (SMD) 2P       |                  |
| C962    | 1-104-915-11 | TANTAL.CHIP  | 2.2UF 20.00% 20V   | CN816   | 1-779-730-11   | CONNECTOR,FFC/FPC (ZIF) 24P  |                  |
| C963    | 1-104-760-11 | CERAMIC CHIP | 0.047UF 10.00% 50V | CN818   | 1-779-730-11   | CONNECTOR,FFC/FPC (ZIF) 24P  |                  |
| C964    | 1-104-760-11 | CERAMIC CHIP | 0.047UF 10.00% 50V | CN820   | * 1-580-055-21 | PIN,CONNECTOR (SMD) 2P       |                  |
| C965    | 1-126-394-11 | ELECT CHIP   | 10UF 20.00% 16V    |         |                | <DIODE>                      |                  |
| C966    | 1-128-394-11 | ELECT CHIP   | 220UF 20.00% 10V   | D801    | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                  |
| C967    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | D802    | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                  |
| C968    | 1-128-394-11 | ELECT CHIP   | 220UF 20.00% 10V   | D803    | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                  |
| C969    | 1-115-340-11 | CERAMIC CHIP | 0.22UF 10.00% 25V  | D804    | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                  |
| C970    | 1-115-340-11 | CERAMIC CHIP | 0.22UF 10.00% 25V  | D805    | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                  |
| C971    | 1-117-681-11 | ELECT CHIP   | 100UF 20.00% 16V   | D806    | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                  |
| C972    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | D807    | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                  |
| C975    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V   | D812    | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                  |
| C976    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   | D813    | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                  |
| C977    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   | D814    | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                  |
| C978    | 1-117-370-11 | CERAMIC CHIP | 10UF 10V           | D815    | 8-719-988-61   | DIODE 1SS355TE-17            |                  |
| C981    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | D816    | 8-719-988-61   | DIODE 1SS355TE-17            |                  |
| C982    | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10.00% 50V |         |                | <FERRITE BEAD>               |                  |
| C983    | 1-128-400-11 | ELECT CHIP   | 47UF 20.00% 25V    | FB801   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C984    | 1-162-919-11 | CERAMIC CHIP | 22PF 5.00% 50V     | FB802   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C985    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   | FB803   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C988    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB804   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C989    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB805   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C990    | 1-128-400-11 | ELECT CHIP   | 47UF 20.00% 25V    | FB807   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C991    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB809   | 1-414-950-21   | FERRITE                      | 0UH              |
| C992    | 1-117-681-11 | ELECT CHIP   | 100UF 20.00% 16V   | FB810   | 1-414-950-21   | FERRITE                      | 0UH              |
| C993    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB811   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C996    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB812   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C997    | 1-164-005-11 | CERAMIC CHIP | 0.47UF 25V         | FB813   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1002   | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V   | FB814   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1003   | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   | FB815   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1004   | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   | FB816   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1005   | 1-117-370-11 | CERAMIC CHIP | 10UF 10V           | FB817   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1008   | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB818   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1009   | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10.00% 50V | FB819   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1010   | 1-128-400-11 | ELECT CHIP   | 47UF 20.00% 25V    | FB832   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1011   | 1-162-919-11 | CERAMIC CHIP | 22PF 5.00% 50V     | FB833   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1012   | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   | FB837   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1015   | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB841   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1016   | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB842   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1017   | 1-128-400-11 | ELECT CHIP   | 47UF 20.00% 25V    | FB846   | 1-414-234-22   | INDUCTOR                     | 0UH              |
| C1018   | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB850   | 1-414-921-11   | INDUCTOR                     | 0UH              |
| C1019   | 1-117-681-11 | ELECT CHIP   | 100UF 20.00% 16V   |         |                | <FILTER>                     |                  |
| C1020   | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FL801   | 1-239-899-21   | FILTER,CHIP EMI              |                  |
| C1023   | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   |         |                |                              |                  |
| C1024   | 1-164-005-11 | CERAMIC CHIP | 0.47UF 25V         |         |                |                              |                  |
| C1028   | 1-109-982-11 | CERAMIC CHIP | 1UF 10.00% 10V     |         |                |                              |                  |
| C1029   | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   |         |                |                              |                  |
| C1030   | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   |         |                |                              |                  |
| C1031   | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   |         |                |                              |                  |



| Ref.No.      | Part No.     | Description                  | Remark | Ref.No.    | Part No.     | Description          | Remark |
|--------------|--------------|------------------------------|--------|------------|--------------|----------------------|--------|
| <IC>         |              |                              |        | <RESISTOR> |              |                      |        |
| IC801        | 8-759-388-31 | IC PQ20VZ1U                  |        | R801       | 1-216-833-11 | RES-CHIP 10K 5%      | 1/16W  |
| IC802        | 8-759-460-81 | IC BA12FP-E2                 |        | R802       | 1-218-723-11 | METAL CHIP 20K 0.5%  | 1/16W  |
| IC803        | 8-759-584-86 | IC M52749FP-TP               |        | R803       | 1-218-714-11 | METAL CHIP 8.2K 0.5% | 1/16W  |
| IC804        | 8-759-523-81 | IC TC74VHC08FT(EL)           |        | R804       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| IC806        | 8-759-645-13 | IC ADV7123KST140             |        | R805       | 1-216-864-11 | SHORT 0              |        |
| IC807        | 8-759-571-03 | IC LM4041DIM3-1.2(T&R)       |        | R806       | 1-216-829-11 | RES-CHIP 4.7K 5%     | 1/16W  |
| IC808        | 8-759-592-44 | IC TC7SZ04FU(Te85R)          |        | R807       | 1-218-685-11 | METAL CHIP 510 0.5%  | 1/16W  |
| IC811        | 8-759-491-46 | IC TC74VHCT04AFT(EL)         |        | R809       | 1-216-057-00 | RES-CHIP 2.2K 5%     | 1/10W  |
| IC812        | 8-759-658-73 | IC ISPLSI1016E-80LT44-SX1697 |        | R810       | 1-216-057-00 | RES-CHIP 2.2K 5%     | 1/10W  |
| IC813        | 8-759-491-46 | IC TC74VHCT04AFT(EL)         |        | R811       | 1-216-864-11 | SHORT 0              |        |
| IC814        | 8-759-482-35 | IC MC100ELT20DR2             |        | R812       | 1-216-829-11 | RES-CHIP 4.7K 5%     | 1/16W  |
| IC817        | 8-759-064-36 | IC MB88346BPFV-EF            |        | R813       | 1-216-817-11 | RES-CHIP 470 5%      | 1/16W  |
| IC818        | 8-759-544-55 | IC MAX4066CEE-TE2            |        | R814       | 1-216-817-11 | RES-CHIP 470 5%      | 1/16W  |
| IC819        | 8-752-080-99 | IC CXA2112R-T6               |        | R815       | 1-216-295-11 | SHORT 0              |        |
| IC823        | 8-759-702-02 | IC NJM2073M(TE2)             |        | R816       | 1-216-829-11 | RES-CHIP 4.7K 5%     | 1/16W  |
| IC824        | 8-759-702-02 | IC NJM2073M(TE2)             |        | R817       | 1-216-057-00 | RES-CHIP 2.2K 5%     | 1/10W  |
| IC825        | 8-752-091-06 | IC CXA1846BN-T4              |        | R818       | 1-216-057-00 | RES-CHIP 2.2K 5%     | 1/10W  |
| IC826        | 8-752-080-99 | IC CXA2112R-T6               |        | R819       | 1-216-864-11 | SHORT 0              |        |
| IC829        | 8-752-080-99 | IC CXA2112R-T6               |        | R821       | 1-216-817-11 | RES-CHIP 470 5%      | 1/16W  |
| IC831        | 8-759-491-46 | IC TC74VHCT04AFT(EL)         |        | R822       | 1-216-817-11 | RES-CHIP 470 5%      | 1/16W  |
| IC833        | 8-752-400-93 | IC CXD3503R-T6               |        | R823       | 1-218-692-11 | METAL CHIP 1K 0.5%   | 1/16W  |
| IC834        | 8-759-574-34 | IC LMV358MMX                 |        | R824       | 1-216-057-00 | RES-CHIP 2.2K 5%     | 1/10W  |
| IC835        | 8-759-183-53 | IC TL431CPK-E2               |        | R825       | 1-216-057-00 | RES-CHIP 2.2K 5%     | 1/10W  |
|              |              |                              |        | R826       | 1-218-692-11 | METAL CHIP 1K 0.5%   | 1/16W  |
|              |              |                              |        | R827       | 1-216-864-11 | SHORT 0              |        |
| <COIL>       |              |                              |        | R828       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| L803         | 1-410-381-11 | INDUCTOR 10UH                |        | R829       | 1-216-833-11 | RES-CHIP 10K 5%      | 1/16W  |
| L804         | 1-410-393-11 | INDUCTOR 100UH               |        | R832       | 1-216-817-11 | RES-CHIP 470 5%      | 1/16W  |
| L805         | 1-469-524-91 | INDUCTOR 4.7UH               |        | R833       | 1-216-817-11 | RES-CHIP 470 5%      | 1/16W  |
| L806         | 1-410-369-11 | INDUCTOR 1UH                 |        | R834       | 1-216-853-11 | RES-CHIP 470K 5%     | 1/16W  |
| L807         | 1-410-369-11 | INDUCTOR 1UH                 |        | R835       | 1-218-702-11 | METAL CHIP 2.7K 0.5% | 1/16W  |
| L812         | 1-410-377-31 | INDUCTOR 4.7UH               |        | R836       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| L813         | 1-414-752-11 | INDUCTOR 2.2UH               |        | R837       | 1-216-841-11 | RES-CHIP 47K 5%      | 1/16W  |
| L814         | 1-410-369-11 | INDUCTOR 1UH                 |        | R838       | 1-216-829-11 | RES-CHIP 4.7K 5%     | 1/16W  |
| L815         | 1-410-369-11 | INDUCTOR 1UH                 |        | R843       | 1-216-829-11 | RES-CHIP 4.7K 5%     | 1/16W  |
| L816         | 1-410-369-11 | INDUCTOR 1UH                 |        | R844       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| L817         | 1-410-369-11 | INDUCTOR 1UH                 |        | R846       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| L818         | 1-410-369-11 | INDUCTOR 1UH                 |        | R847       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| L819         | 1-414-170-41 | INDUCTOR 100UH               |        | R848       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| L820         | 1-414-170-41 | INDUCTOR 100UH               |        | R849       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| L821         | 1-414-170-41 | INDUCTOR 100UH               |        | R850       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
|              |              |                              |        | R851       | 1-216-864-11 | SHORT 0              |        |
|              |              |                              |        | R852       | 1-216-864-11 | SHORT 0              |        |
|              |              |                              |        | R853       | 1-218-686-11 | METAL CHIP 560 0.5%  | 1/16W  |
|              |              |                              |        | R854       | 1-216-827-11 | RES-CHIP 3.3K 5%     | 1/16W  |
| <TRANSISTOR> |              |                              |        | R855       | 1-218-692-11 | METAL CHIP 1K 0.5%   | 1/16W  |
| Q801         | 1-801-806-11 | TRANSISTOR DTC144EKA-T146    |        | R856       | 1-218-692-11 | METAL CHIP 1K 0.5%   | 1/16W  |
| Q802         | 8-729-112-65 | TRANSISTOR 2SA1462-T1Y33Y34  |        | R857       | 1-218-658-11 | METAL CHIP 39 0.5%   | 1/16W  |
| Q803         | 8-729-112-65 | TRANSISTOR 2SA1462-T1Y33Y34  |        | R858       | 1-218-660-91 | METAL CHIP 47 0.5%   | 1/16W  |
| Q804         | 8-729-112-65 | TRANSISTOR 2SA1462-T1Y33Y34  |        | R860       | 1-216-815-11 | RES-CHIP 330 5%      | 1/16W  |
| Q805         | 8-729-112-65 | TRANSISTOR 2SA1462-T1Y33Y34  |        | R862       | 1-218-658-11 | METAL CHIP 39 0.5%   | 1/16W  |
| Q806         | 8-729-216-22 | TRANSISTOR 2SA1162-YG-TE85L  |        | R863       | 1-216-815-11 | RES-CHIP 330 5%      | 1/16W  |
| Q807         | 8-729-216-22 | TRANSISTOR 2SA1162-YG-TE85L  |        | R864       | 1-218-660-91 | METAL CHIP 47 0.5%   | 1/16W  |
| Q808         | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R    |        | R865       | 1-216-815-11 | RES-CHIP 330 5%      | 1/16W  |
| Q809         | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R    |        | R867       | 1-216-815-11 | RES-CHIP 330 5%      | 1/16W  |
| Q810         | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R    |        | R869       | 1-218-658-11 | METAL CHIP 39 0.5%   | 1/16W  |
| Q811         | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R    |        | R871       | 1-218-660-91 | METAL CHIP 47 0.5%   | 1/16W  |
| Q812         | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R    |        | R875       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| Q813         | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R    |        | R876       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| Q814         | 1-801-806-11 | TRANSISTOR DTC144EKA-T146    |        | R877       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| Q815         | 1-801-806-11 | TRANSISTOR DTC144EKA-T146    |        | R878       | 1-216-864-11 | SHORT 0              |        |
| Q816         | 8-729-216-22 | TRANSISTOR 2SA1162-YG-TE85L  |        | R879       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| Q817         | 8-729-230-49 | TRANSISTOR 2SC2712-YG-TE85L  |        | R880       | 1-216-809-11 | RES-CHIP 100 5%      | 1/16W  |
| Q818         | 1-801-806-11 | TRANSISTOR DTC144EKA-T146    |        | R882       | 1-216-864-11 | SHORT 0              |        |
|              |              |                              |        | R884       | 1-218-692-11 | METAL CHIP 1K 0.5%   | 1/16W  |

| Ref.No. | Part No.     | Description | Remark |      |       | Ref.No. | Part No.     | Description | Remark |      |       |
|---------|--------------|-------------|--------|------|-------|---------|--------------|-------------|--------|------|-------|
| R885    | 1-216-864-11 | SHORT       | 0      |      |       | R961    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
| R886    | 1-218-692-11 | METAL CHIP  | 1K     | 0.5% | 1/16W | R964    | 1-218-703-11 | METAL CHIP  | 3K     | 0.5% | 1/16W |
| R887    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R965    | 1-218-690-11 | METAL CHIP  | 820    | 0.5% | 1/16W |
| R889    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |         |              |             |        |      |       |
| R891    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R967    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
|         |              |             |        |      |       | R968    | 1-216-864-11 | SHORT       | 0      |      |       |
| R892    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R975    | 1-216-864-11 | SHORT       | 0      |      |       |
| R893    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R977    | 1-218-726-11 | METAL CHIP  | 27K    | 0.5% | 1/16W |
| R894    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R979    | 1-216-864-11 | SHORT       | 0      |      |       |
| R895    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |         |              |             |        |      |       |
| R896    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R982    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |             |        |      |       | R983    | 1-216-864-11 | SHORT       | 0      |      |       |
| R897    | 1-216-864-11 | SHORT       | 0      |      |       | R984    | 1-216-864-11 | SHORT       | 0      |      |       |
| R898    | 1-216-864-11 | SHORT       | 0      |      |       | R985    | 1-216-864-11 | SHORT       | 0      |      |       |
| R899    | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W | R986    | 1-216-864-11 | SHORT       | 0      |      |       |
| R900    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |         |              |             |        |      |       |
| R901    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R987    | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |             |        |      |       | R994    | 1-216-864-11 | SHORT       | 0      |      |       |
| R902    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R995    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R903    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R999    | 1-216-864-11 | SHORT       | 0      |      |       |
| R904    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R1000   | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
| R905    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |         |              |             |        |      |       |
| R906    | 1-216-815-11 | RES-CHIP    | 330    | 5%   | 1/16W | R1002   | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
|         |              |             |        |      |       | R1003   | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |
| R907    | 1-216-815-11 | RES-CHIP    | 330    | 5%   | 1/16W | R1004   | 1-216-864-11 | SHORT       | 0      |      |       |
| R908    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1008   | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R911    | 1-216-864-11 | SHORT       | 0      |      |       | R1023   | 1-216-864-11 | SHORT       | 0      |      |       |
| R912    | 1-216-817-11 | RES-CHIP    | 470    | 5%   | 1/16W |         |              |             |        |      |       |
| R913    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1024   | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |             |        |      |       | R1027   | 1-216-864-11 | SHORT       | 0      |      |       |
| R914    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1028   | 1-216-864-11 | SHORT       | 0      |      |       |
| R915    | 1-216-864-11 | SHORT       | 0      |      |       | R1029   | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R916    | 1-216-817-11 | RES-CHIP    | 470    | 5%   | 1/16W | R1030   | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R919    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W |         |              |             |        |      |       |
| R920    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R1031   | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R921    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R1032   | 1-216-832-11 | RES-CHIP    | 8.2K   | 5%   | 1/16W |
| R924    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1033   | 1-216-832-11 | RES-CHIP    | 8.2K   | 5%   | 1/16W |
| R925    | 1-216-864-11 | SHORT       | 0      |      |       | R1034   | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W |
| R926    | 1-216-864-11 | SHORT       | 0      |      |       | R1035   | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W |
| R927    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R1036   | 1-216-841-11 | RES-CHIP    | 47K    | 5%   | 1/16W |
| R928    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1037   | 1-216-033-00 | RES-CHIP    | 220    | 5%   | 1/10W |
| R929    | 1-216-829-11 | RES-CHIP    | 4.7K   | 5%   | 1/16W | R1038   | 1-216-841-11 | RES-CHIP    | 47K    | 5%   | 1/16W |
| R930    | 1-216-864-11 | SHORT       | 0      |      |       | R1039   | 1-216-033-00 | RES-CHIP    | 220    | 5%   | 1/10W |
| R931    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R1040   | 1-216-830-11 | RES-CHIP    | 5.6K   | 5%   | 1/16W |
| R932    | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       | R1041   | 1-216-845-11 | RES-CHIP    | 100K   | 5%   | 1/16W |
| R933    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R1042   | 1-216-830-11 | RES-CHIP    | 5.6K   | 5%   | 1/16W |
| R934    | 1-216-864-11 | SHORT       | 0      |      |       | R1043   | 1-216-823-11 | RES-CHIP    | 1.5K   | 5%   | 1/16W |
| R935    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R1044   | 1-216-827-11 | RES-CHIP    | 3.3K   | 5%   | 1/16W |
| R936    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1045   | 1-217-671-11 | RES-CHIP    | 1      | 5%   | 1/10W |
| R937    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R1046   | 1-217-671-11 | RES-CHIP    | 1      | 5%   | 1/10W |
| R938    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1047   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R939    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W | R1053   | 1-216-829-11 | RES-CHIP    | 4.7K   | 5%   | 1/16W |
| R940    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W | R1054   | 1-218-703-11 | METAL CHIP  | 3K     | 0.5% | 1/16W |
| R941    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W | R1055   | 1-218-690-11 | METAL CHIP  | 820    | 0.5% | 1/16W |
| R942    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R1057   | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
| R943    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W | R1058   | 1-216-864-11 | SHORT       | 0      |      |       |
| R944    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W | R1061   | 1-216-864-11 | SHORT       | 0      |      |       |
| R945    | 1-216-864-11 | SHORT       | 0      |      |       | R1065   | 1-216-864-11 | SHORT       | 0      |      |       |
| R946    | 1-216-864-11 | SHORT       | 0      |      |       | R1067   | 1-218-726-11 | METAL CHIP  | 27K    | 0.5% | 1/16W |
| R947    | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       | R1069   | 1-216-864-11 | SHORT       | 0      |      |       |
| R948    | 1-216-829-11 | RES-CHIP    | 4.7K   | 5%   | 1/16W | R1072   | 1-216-864-11 | SHORT       | 0      |      |       |
| R949    | 1-216-864-11 | SHORT       | 0      |      |       | R1073   | 1-216-864-11 | SHORT       | 0      |      |       |
| R950    | 1-216-830-11 | RES-CHIP    | 5.6K   | 5%   | 1/16W | R1074   | 1-216-864-11 | SHORT       | 0      |      |       |
| R951    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1075   | 1-216-864-11 | SHORT       | 0      |      |       |
| R952    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R1076   | 1-216-864-11 | SHORT       | 0      |      |       |
| R953    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W | R1077   | 1-216-864-11 | SHORT       | 0      |      |       |
| R954    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1084   | 1-216-864-11 | SHORT       | 0      |      |       |
| R955    | 1-216-864-11 | SHORT       | 0      |      |       | R1085   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R957    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1087   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R958    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R1095   | 1-218-703-11 | METAL CHIP  | 3K     | 0.5% | 1/16W |
| R959    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1096   | 1-218-690-11 | METAL CHIP  | 820    | 0.5% | 1/16W |
| R960    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R1098   | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |

| Ref.No.                              | Part No.     | Description  | Remark |        |       | Ref.No. | Part No.     | Description  | Remark  |             |  |
|--------------------------------------|--------------|--------------|--------|--------|-------|---------|--------------|--------------|---------|-------------|--|
| R1099                                | 1-216-864-11 | SHORT        | 0      |        |       | C789    | 1-165-319-11 | CERAMIC CHIP | 0.1UF   | 50V         |  |
| R1102                                | 1-216-864-11 | SHORT        | 0      |        |       | C801    | 1-117-681-11 | ELECT CHIP   | 100UF   | 20.00% 16V  |  |
|                                      |              |              |        |        |       | C802    | 1-128-400-11 | ELECT CHIP   | 47UF    | 20.00% 25V  |  |
| R1106                                | 1-216-864-11 | SHORT        | 0      |        |       | C803    | 1-128-400-11 | ELECT CHIP   | 47UF    | 20.00% 25V  |  |
| R1108                                | 1-218-726-11 | METAL CHIP   | 27K    | 0.5%   | 1/16W | C804    | 1-128-400-11 | ELECT CHIP   | 47UF    | 20.00% 25V  |  |
| R1110                                | 1-216-864-11 | SHORT        | 0      |        |       | C805    | 1-135-346-21 | ELECT        | 39UF    | 20% 16V     |  |
| R1113                                | 1-216-864-11 | SHORT        | 0      |        |       | C808    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% 25V  |  |
| R1114                                | 1-216-864-11 | SHORT        | 0      |        |       | C810    | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% 6.3V |  |
| R1115                                | 1-216-864-11 | SHORT        | 0      |        |       |         |              |              |         |             |  |
| R1116                                | 1-216-864-11 | SHORT        | 0      |        |       | C813    | 1-124-779-00 | ELECT CHIP   | 10UF    | 20.00% 16V  |  |
| R1117                                | 1-216-864-11 | SHORT        | 0      |        |       | C814    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| R1118                                | 1-216-864-11 | SHORT        | 0      |        |       | C816    | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% 6.3V |  |
| R1125                                | 1-216-864-11 | SHORT        | 0      |        |       | C819    | 1-124-779-00 | ELECT CHIP   | 10UF    | 20.00% 16V  |  |
|                                      |              |              |        |        |       | C820    | 1-124-779-00 | ELECT CHIP   | 10UF    | 20.00% 16V  |  |
| R1126                                | 1-216-833-11 | RES-CHIP     | 10K    | 5%     | 1/16W |         |              |              |         |             |  |
| R1130                                | 1-216-833-11 | RES-CHIP     | 10K    | 5%     | 1/16W | C821    | 1-115-340-11 | CERAMIC CHIP | 0.22UF  | 10.00% 25V  |  |
| R1131                                | 1-216-817-11 | RES-CHIP     | 470    | 5%     | 1/16W | C822    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% 25V  |  |
| R1132                                | 1-216-817-11 | RES-CHIP     | 470    | 5%     | 1/16W | C824    | 1-115-340-11 | CERAMIC CHIP | 0.22UF  | 10.00% 25V  |  |
| R1133                                | 1-216-817-11 | RES-CHIP     | 470    | 5%     | 1/16W | C826    | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% 6.3V |  |
|                                      |              |              |        |        |       | C829    | 1-124-779-00 | ELECT CHIP   | 10UF    | 20.00% 16V  |  |
| R1134                                | 1-218-688-11 | METAL CHIP   | 680    | 0.5%   | 1/16W |         |              |              |         |             |  |
| R1135                                | 1-218-698-11 | METAL CHIP   | 1.8K   | 0.5%   | 1/16W | C830    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% 25V  |  |
| R1136                                | 1-218-702-11 | METAL CHIP   | 2.7K   | 0.5%   | 1/16W | C831    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% 25V  |  |
| R1141                                | 1-216-829-11 | RES-CHIP     | 4.7K   | 5%     | 1/16W | C832    | 1-126-391-11 | ELECT CHIP   | 47UF    | 20.00% 6.3V |  |
| R1142                                | 1-216-821-11 | RES-CHIP     | 1K     | 5%     | 1/16W | C833    | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10% 6.3V    |  |
|                                      |              |              |        |        |       | C834    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% 25V  |  |
| R1143                                | 1-218-710-11 | METAL CHIP   | 5.6K   | 0.5%   | 1/16W |         |              |              |         |             |  |
| R1144                                | 1-216-813-11 | RES-CHIP     | 220    | 5%     | 1/16W | C839    | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% 6.3V |  |
| R1145                                | 1-218-658-11 | METAL CHIP   | 39     | 0.5%   | 1/16W | C840    | 1-162-970-11 | CERAMIC CHIP | 0.01UF  | 10.00% 25V  |  |
| R1146                                | 1-216-864-11 | SHORT        | 0      |        |       | C841    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C848    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C849    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| <THERMISTOR>                         |              |              |        |        |       |         |              |              |         |             |  |
| TH801                                | 1-808-656-11 | THERMISTOR   |        |        |       | C850    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| TH802                                | 1-808-656-11 | THERMISTOR   |        |        |       | C851    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C852    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C853    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C854    | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10% 6.3V    |  |
| <TEST PIN>                           |              |              |        |        |       |         |              |              |         |             |  |
| TP801                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C855    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| TP802                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C856    | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10% 6.3V    |  |
| TP803                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C857    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| TP804                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C858    | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% 6.3V |  |
| TP805                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C859    | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10% 6.3V    |  |
| TP806                                | 1-535-757-11 | CHIP,CHECKER |        |        |       |         |              |              |         |             |  |
| TP807                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C860    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| TP808                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C863    | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10% 6.3V    |  |
| TP809                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C864    | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10% 6.3V    |  |
| TP810                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C865    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C866    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| TP811                                | 1-535-757-11 | CHIP,CHECKER |        |        |       |         |              |              |         |             |  |
| TP812                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C867    | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10% 6.3V    |  |
| TP813                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C868    | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10% 6.3V    |  |
| TP814                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C869    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| TP816                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C870    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C871    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| TP817                                | 1-535-757-11 | CHIP,CHECKER |        |        |       |         |              |              |         |             |  |
| TP818                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C872    | 1-125-837-91 | CERAMIC CHIP | 1UF     | 10% 6.3V    |  |
| TP820                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C873    | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% 6.3V |  |
| TP821                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C874    | 1-164-004-11 | CERAMIC CHIP | 0.1UF   | 10.00% 25V  |  |
| TP822                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C875    | 1-164-004-11 | CERAMIC CHIP | 0.1UF   | 10.00% 25V  |  |
|                                      |              |              |        |        |       | C876    | 1-164-004-11 | CERAMIC CHIP | 0.1UF   | 10.00% 25V  |  |
| TP823                                | 1-535-757-11 | CHIP,CHECKER |        |        |       |         |              |              |         |             |  |
| TP824                                | 1-535-757-11 | CHIP,CHECKER |        |        |       | C877    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C879    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C880    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C881    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C882    | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% 6.3V |  |
| *****                                |              |              |        |        |       |         |              |              |         |             |  |
| * A-1335-134-A C COMPL (For VPL-CX1) |              |              |        |        |       |         |              |              |         |             |  |
| *****                                |              |              |        |        |       | C883    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
|                                      |              |              |        |        |       | C885    | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% 50V  |  |
|                                      |              |              |        |        |       | C886    | 1-162-964-11 | CERAMIC CHIP | 0.001UF | 10.00% 50V  |  |
|                                      |              |              |        |        |       | C887    | 1-126-205-11 | ELECT CHIP   | 47UF    | 20.00% 6.3V |  |
|                                      |              |              |        |        |       | C888    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| <CAPACITOR>                          |              |              |        |        |       |         |              |              |         |             |  |
| C763                                 | 1-162-970-11 | CERAMIC CHIP | 0.01UF | 10.00% | 25V   | C889    | 1-107-826-11 | CERAMIC CHIP | 0.1UF   | 10.00% 16V  |  |
| C788                                 | 1-164-004-11 | CERAMIC CHIP | 0.1UF  | 10.00% | 25V   | C890    | 1-117-370-11 | CERAMIC CHIP | 10UF    | 10V         |  |
|                                      |              |              |        |        |       | C891    | 1-115-156-11 | CERAMIC CHIP | 1UF     | 10V         |  |

| Ref.No. | Part No.     | Description  | Remark             | Ref.No.        | Part No.       | Description                  | Remark             |
|---------|--------------|--------------|--------------------|----------------|----------------|------------------------------|--------------------|
| C892    | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V          | C1009          | 1-162-964-11   | CERAMIC CHIP                 | 0.001UF 10.00% 50V |
| C893    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | C1010          | 1-128-400-11   | ELECT CHIP                   | 47UF 20.00% 25V    |
| C894    | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10.00% 50V | C1011          | 1-162-915-11   | CERAMIC CHIP                 | 10PF 0.50PF 50V    |
| C895    | 1-128-400-11 | ELECT CHIP   | 47UF 20.00% 25V    | C1012          | 1-107-826-11   | CERAMIC CHIP                 | 0.1UF 10.00% 16V   |
| C896    | 1-162-915-11 | CERAMIC CHIP | 10PF 0.50PF 50V    | C1015          | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF 10.00% 25V   |
| C897    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   | C1016          | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF 10.00% 25V   |
| C900    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | C1017          | 1-128-400-11   | ELECT CHIP                   | 47UF 20.00% 25V    |
| C901    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | C1018          | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF 10.00% 25V   |
| C902    | 1-128-400-11 | ELECT CHIP   | 47UF 20.00% 25V    | C1019          | 1-117-681-11   | ELECT CHIP                   | 100UF 20.00% 16V   |
| C903    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | C1020          | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF 10.00% 25V   |
| C904    | 1-117-681-11 | ELECT CHIP   | 100UF 20.00% 16V   | C1021          | 1-164-005-11   | CERAMIC CHIP                 | 0.47UF 25V         |
| C905    | 1-164-005-11 | CERAMIC CHIP | 0.47UF 25V         | C1022          | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF 10.00% 25V   |
| C906    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | C1023          | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF 10.00% 25V   |
| C907    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | C1024          | 1-164-005-11   | CERAMIC CHIP                 | 0.47UF 25V         |
| C908    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | C1028          | 1-109-982-11   | CERAMIC CHIP                 | 1UF 10.00% 10V     |
| C909    | 1-164-005-11 | CERAMIC CHIP | 0.47UF 25V         | C1029          | 1-107-826-11   | CERAMIC CHIP                 | 0.1UF 10.00% 16V   |
| C951    | 1-113-985-11 | TANTAL. CHIP | 10UF 20.00% 20V    | C1030          | 1-107-826-11   | CERAMIC CHIP                 | 0.1UF 10.00% 16V   |
| C952    | 1-113-985-11 | TANTAL. CHIP | 10UF 20.00% 20V    | C1031          | 1-107-826-11   | CERAMIC CHIP                 | 0.1UF 10.00% 16V   |
| C953    | 1-126-394-11 | ELECT CHIP   | 10UF 20.00% 16V    | C1032          | 1-107-826-11   | CERAMIC CHIP                 | 0.1UF 10.00% 16V   |
| C954    | 1-163-021-91 | CERAMIC CHIP | 0.01UF 10.00% 50V  | C1036          | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF 10.00% 25V   |
| C955    | 1-126-396-11 | ELECT CHIP   | 47UF 20.00% 16V    | C1037          | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF 10.00% 25V   |
| C956    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | C1038          | 1-164-004-11   | CERAMIC CHIP                 | 0.1UF 10.00% 25V   |
| C957    | 1-125-827-91 | CERAMIC CHIP | 1UF 10.00% 25V     | C1039          | 1-126-391-11   | ELECT CHIP                   | 47UF 20.00% 6.3V   |
| C958    | 1-125-827-91 | CERAMIC CHIP | 1UF 10.00% 25V     | C1041          | 1-125-889-91   | CERAMIC CHIP                 | 2.2UF 10% 10V      |
| C959    | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10.00% 25V  | <CONNECTOR>    |                |                              |                    |
| C960    | 1-162-970-11 | CERAMIC CHIP | 0.01UF 10.00% 25V  | CN801          | * 1-691-551-11 | PIN,CONNECTOR (SMD) 8P       |                    |
| C961    | 1-104-915-11 | TANTAL CHIP  | 2.2UF 20.00% 20V   | CN802          | * 1-580-055-21 | PIN,CONNECTOR (SMD) 2P       |                    |
| C962    | 1-104-915-11 | TANTAL CHIP  | 2.2UF 20.00% 20V   | CN803          | * 1-580-056-21 | PIN,CONNECTOR (SMD) 3P       |                    |
| C963    | 1-104-760-11 | CERAMIC CHIP | 0.047UF 10.00% 50V | CN804          | * 1-569-775-21 | PIN,CONNECTOR (SMD) 5P       |                    |
| C964    | 1-104-760-11 | CERAMIC CHIP | 0.047UF 10.00% 50V | CN805          | * 1-764-007-11 | PIN,CONNECTOR (SMD) 12P      |                    |
| C965    | 1-126-394-11 | ELECT CHIP   | 10UF 20.00% 16V    | CN806          | * 1-569-775-21 | PIN,CONNECTOR (SMD) 5P       |                    |
| C966    | 1-128-394-11 | ELECT CHIP   | 220UF 20.00% 10V   | CN808          | * 1-785-306-21 | CONNECTOR,BOARD TO BOARD70P  |                    |
| C967    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | CN809          | * 1-793-798-21 | CONNECTOR,BOARD TO BOARD 50P |                    |
| C968    | 1-128-394-11 | ELECT CHIP   | 220UF 20.00% 10V   | CN810          | * 1-691-551-11 | PIN,CONNECTOR (SMD) 8P       |                    |
| C969    | 1-115-340-11 | CERAMIC CHIP | 0.22UF 10.00% 25V  | CN812          | * 1-794-823-21 | CONNECTOR (ZIF),FPC/FFC 32P  |                    |
| C970    | 1-115-340-11 | CERAMIC CHIP | 0.22UF 10.00% 25V  | CN815          | * 1-580-055-21 | PIN,CONNECTOR (SMD) 2P       |                    |
| C971    | 1-117-681-11 | ELECT CHIP   | 100UF 20.00% 16V   | CN817          | * 1-794-823-21 | CONNECTOR (ZIF),FPC/FFC 32P  |                    |
| C972    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | CN819          | * 1-794-823-21 | CONNECTOR (ZIF),FPC/FFC 32P  |                    |
| C975    | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V   | CN820          | * 1-580-055-21 | PIN,CONNECTOR (SMD) 2P       |                    |
| C976    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   | <DIODE>        |                |                              |                    |
| C977    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   | D801           | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                    |
| C978    | 1-117-370-11 | CERAMIC CHIP | 10UF 10V           | D802           | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                    |
| C979    | 1-115-156-11 | CERAMIC CHIP | 1UF 10V            | D803           | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                    |
| C980    | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V          | D804           | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                    |
| C981    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | D805           | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                    |
| C982    | 1-162-964-11 | CERAMIC CHIP | 0.001UF 10.00% 50V | D806           | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                    |
| C983    | 1-128-400-11 | ELECT CHIP   | 47UF 20.00% 25V    | D807           | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                    |
| C984    | 1-162-915-11 | CERAMIC CHIP | 10PF 0.50PF 50V    | D812           | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                    |
| C985    | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   | D813           | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                    |
| C988    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | D814           | 8-719-976-99   | DIODE DTZ-TT11-5.1           |                    |
| C989    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | D815           | 8-719-988-61   | DIODE 1SS355TE-17            |                    |
| C990    | 1-128-400-11 | ELECT CHIP   | 47UF 20.00% 25V    | D816           | 8-719-988-61   | DIODE 1SS355TE-17            |                    |
| C991    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | <FERRITE BEAD> |                |                              |                    |
| C992    | 1-117-681-11 | ELECT CHIP   | 100UF 20.00% 16V   | FB714          | 1-414-921-11   | INDUCTOR                     | 0UH                |
| C993    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB801          | 1-414-234-22   | INDUCTOR                     | 0UH                |
| C994    | 1-164-005-11 | CERAMIC CHIP | 0.47UF 25V         | FB802          | 1-414-234-22   | INDUCTOR                     | 0UH                |
| C995    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB803          | 1-414-234-22   | INDUCTOR                     | 0UH                |
| C996    | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   | FB804          | 1-414-234-22   | INDUCTOR                     | 0UH                |
| C997    | 1-164-005-11 | CERAMIC CHIP | 0.47UF 25V         | FB805          | 1-414-234-22   | INDUCTOR                     | 0UH                |
| C1002   | 1-126-205-11 | ELECT CHIP   | 47UF 20.00% 6.3V   | FB807          | 1-414-234-22   | INDUCTOR                     | 0UH                |
| C1003   | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   |                |                |                              |                    |
| C1004   | 1-107-826-11 | CERAMIC CHIP | 0.1UF 10.00% 16V   |                |                |                              |                    |
| C1005   | 1-117-370-11 | CERAMIC CHIP | 10UF 10V           |                |                |                              |                    |
| C1006   | 1-115-156-11 | CERAMIC CHIP | 1UF 10V            |                |                |                              |                    |
| C1007   | 1-164-156-11 | CERAMIC CHIP | 0.1UF 25V          |                |                |                              |                    |
| C1008   | 1-164-004-11 | CERAMIC CHIP | 0.1UF 10.00% 25V   |                |                |                              |                    |

| Ref.No. | Part No.     | Description                   | Remark | Ref.No. | Part No.     | Description                 | Remark          |
|---------|--------------|-------------------------------|--------|---------|--------------|-----------------------------|-----------------|
| FB809   | 1-414-950-21 | FERRITE                       | 0UH    | L821    | 1-414-170-41 | INDUCTOR                    | 100UH           |
| FB810   | 1-414-950-21 | FERRITE                       | 0UH    | L823    | 1-410-369-11 | INDUCTOR                    | 1UH             |
| FB811   | 1-414-234-22 | INDUCTOR                      | 0UH    |         |              |                             |                 |
| FB812   | 1-414-234-22 | INDUCTOR                      | 0UH    |         |              | <TRANSISTOR>                |                 |
| FB813   | 1-414-234-22 | INDUCTOR                      | 0UH    | Q801    | 1-801-806-11 | TRANSISTOR DTC144EKA-T146   |                 |
| FB814   | 1-414-234-22 | INDUCTOR                      | 0UH    | Q802    | 8-729-112-65 | TRANSISTOR 2SA1462-T1Y33Y34 |                 |
| FB815   | 1-414-234-22 | INDUCTOR                      | 0UH    | Q803    | 8-729-112-65 | TRANSISTOR 2SA1462-T1Y33Y34 |                 |
| FB816   | 1-414-234-22 | INDUCTOR                      | 0UH    | Q804    | 8-729-112-65 | TRANSISTOR 2SA1462-T1Y33Y34 |                 |
| FB817   | 1-414-234-22 | INDUCTOR                      | 0UH    | Q805    | 8-729-112-65 | TRANSISTOR 2SA1462-T1Y33Y34 |                 |
| FB818   | 1-414-234-22 | INDUCTOR                      | 0UH    | Q806    | 8-729-216-22 | TRANSISTOR 2SA1162-YG-TE85L |                 |
| FB832   | 1-414-234-22 | INDUCTOR                      | 0UH    | Q807    | 8-729-216-22 | TRANSISTOR 2SA1162-YG-TE85L |                 |
| FB833   | 1-414-234-22 | INDUCTOR                      | 0UH    | Q808    | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R   |                 |
| FB841   | 1-414-234-22 | INDUCTOR                      | 0UH    | Q809    | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R   |                 |
| FB842   | 1-414-234-22 | INDUCTOR                      | 0UH    | Q810    | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R   |                 |
| FB850   | 1-414-921-11 | INDUCTOR                      | 0UH    |         |              |                             |                 |
|         |              | <FILTER>                      |        | Q811    | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R   |                 |
| FL801   | 1-239-899-21 | FILTER,CHIP EMI               |        | Q812    | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R   |                 |
|         |              | <IC>                          |        | Q813    | 8-729-013-28 | TRANSISTOR HN1B01FU-TE85R   |                 |
| IC714   | 8-759-252-41 | IC TK11900MTL                 |        | Q814    | 1-801-806-11 | TRANSISTOR DTC144EKA-T146   |                 |
| IC801   | 8-759-388-31 | IC PQ20VZ1U                   |        | Q815    | 1-801-806-11 | TRANSISTOR DTC144EKA-T146   |                 |
| IC802   | 8-759-460-81 | IC BA12FP-E2                  |        |         |              |                             |                 |
| IC803   | 8-759-584-86 | IC M52749FP-TP                |        |         |              | <RESISTOR>                  |                 |
| IC804   | 8-759-523-81 | IC TC74VHC08FT (EL)           |        | R798    | 1-218-720-11 | METAL CHIP                  | 15K 0.5% 1/16W  |
| IC806   | 8-759-645-13 | IC ADV7123KST140              |        | R799    | 1-218-744-11 | METAL CHIP                  | 150K 0.5% 1/16W |
| IC807   | 8-759-571-03 | IC LM4041DIM3-1.2 (T&R)       |        | R801    | 1-216-833-11 | RES-CHIP                    | 10K 5% 1/16W    |
| IC808   | 8-759-592-44 | IC TC7SZ04FU(TE85R)           |        | R802    | 1-218-723-11 | METAL CHIP                  | 20K 0.5% 1/16W  |
| IC811   | 8-759-491-46 | IC TC74VHCT04AFT (EL)         |        | R803    | 1-218-714-11 | METAL CHIP                  | 8.2K 0.5% 1/16W |
| IC812   | 8-759-698-73 | IC ISPLSI1016E-100LT44-SX1708 |        | R804    | 1-216-809-11 | RES-CHIP                    | 100 5% 1/16W    |
| IC813   | 8-759-491-46 | IC TC74VHCT04AFT (EL)         |        | R806    | 1-216-829-11 | RES-CHIP                    | 4.7K 5% 1/16W   |
| IC814   | 8-759-482-35 | IC MC100ELT20DR2              |        | R807    | 1-218-685-11 | METAL CHIP                  | 510 0.5% 1/16W  |
| IC817   | 8-759-064-36 | IC MB88346BPFV-EF             |        | R809    | 1-216-057-00 | RES-CHIP                    | 2.2K 5% 1/10W   |
| IC818   | 8-759-544-55 | IC MAX4066CEE-TE2             |        | R810    | 1-216-057-00 | RES-CHIP                    | 2.2K 5% 1/10W   |
| IC819   | 8-752-080-99 | IC CXA2112R-T6                |        | R811    | 1-216-864-11 | SHORT                       | 0               |
| IC820   | 8-752-080-99 | IC CXA2112R-T6                |        | R812    | 1-216-829-11 | RES-CHIP                    | 4.7K 5% 1/16W   |
| IC823   | 8-759-702-02 | IC NJM2073M (TE2)             |        | R813    | 1-216-817-11 | RES-CHIP                    | 470 5% 1/16W    |
| IC824   | 8-759-702-02 | IC NJM2073M (TE2)             |        | R814    | 1-216-817-11 | RES-CHIP                    | 470 5% 1/16W    |
| IC825   | 8-752-091-06 | IC CXA1846BN-T4               |        | R816    | 1-216-829-11 | RES-CHIP                    | 4.7K 5% 1/16W   |
| IC826   | 8-752-080-99 | IC CXA2112R-T6                |        | R817    | 1-216-057-00 | RES-CHIP                    | 2.2K 5% 1/10W   |
| IC827   | 8-752-080-99 | IC CXA2112R-T6                |        | R818    | 1-216-057-00 | RES-CHIP                    | 2.2K 5% 1/10W   |
| IC829   | 8-752-080-99 | IC CXA2112R-T6                |        | R819    | 1-216-864-11 | SHORT                       | 0               |
| IC830   | 8-752-080-99 | IC CXA2112R-T6                |        | R821    | 1-216-817-11 | RES-CHIP                    | 470 5% 1/16W    |
| IC831   | 8-759-491-46 | IC TC74VHCT04AFT (EL)         |        | R822    | 1-216-817-11 | RES-CHIP                    | 470 5% 1/16W    |
| IC833   | 8-752-400-93 | IC CXD3503R-T6                |        | R823    | 1-218-692-11 | METAL CHIP                  | 1K 0.5% 1/16W   |
| IC834   | 8-759-574-34 | IC LMV358MMX                  |        | R824    | 1-216-057-00 | RES-CHIP                    | 2.2K 5% 1/10W   |
| IC835   | 8-759-183-53 | IC TL431CPK-E2                |        | R825    | 1-216-057-00 | RES-CHIP                    | 2.2K 5% 1/10W   |
|         |              | <COIL>                        |        | R826    | 1-218-692-11 | METAL CHIP                  | 1K 0.5% 1/16W   |
| L803    | 1-410-381-11 | INDUCTOR                      | 10UH   | R827    | 1-216-864-11 | SHORT                       | 0               |
| L804    | 1-410-393-11 | INDUCTOR                      | 100UH  | R828    | 1-216-809-11 | RES-CHIP                    | 100 5% 1/16W    |
| L805    | 1-469-524-91 | INDUCTOR                      | 4.7UH  | R829    | 1-216-833-11 | RES-CHIP                    | 10K 5% 1/16W    |
| L806    | 1-410-369-11 | INDUCTOR                      | 1UH    | R832    | 1-216-817-11 | RES-CHIP                    | 470 5% 1/16W    |
| L807    | 1-410-369-11 | INDUCTOR                      | 1UH    | R833    | 1-216-817-11 | RES-CHIP                    | 470 5% 1/16W    |
| L812    | 1-410-377-31 | INDUCTOR                      | 4.7UH  | R834    | 1-216-853-11 | RES-CHIP                    | 470K 5% 1/16W   |
| L813    | 1-414-752-11 | INDUCTOR                      | 2.2UH  | R835    | 1-218-702-11 | METAL CHIP                  | 2.7K 0.5% 1/16W |
| L814    | 1-410-369-11 | INDUCTOR                      | 1UH    | R836    | 1-216-809-11 | RES-CHIP                    | 100 5% 1/16W    |
| L815    | 1-410-369-11 | INDUCTOR                      | 1UH    | R837    | 1-216-841-11 | RES-CHIP                    | 47K 5% 1/16W    |
| L816    | 1-410-369-11 | INDUCTOR                      | 1UH    | R838    | 1-216-829-11 | RES-CHIP                    | 4.7K 5% 1/16W   |
| L817    | 1-410-369-11 | INDUCTOR                      | 1UH    | R843    | 1-216-829-11 | RES-CHIP                    | 4.7K 5% 1/16W   |
| L818    | 1-410-369-11 | INDUCTOR                      | 1UH    | R844    | 1-216-809-11 | RES-CHIP                    | 100 5% 1/16W    |
| L819    | 1-414-170-41 | INDUCTOR                      | 100UH  | R846    | 1-216-809-11 | RES-CHIP                    | 100 5% 1/16W    |
| L820    | 1-414-170-41 | INDUCTOR                      | 100UH  | R847    | 1-216-809-11 | RES-CHIP                    | 100 5% 1/16W    |
|         |              |                               |        | R848    | 1-216-809-11 | RES-CHIP                    | 100 5% 1/16W    |
|         |              |                               |        | R849    | 1-216-809-11 | RES-CHIP                    | 100 5% 1/16W    |

| Ref.No. | Part No.     | Description | Remark |      |       | Ref.No. | Part No.     | Description | Remark |      |       |
|---------|--------------|-------------|--------|------|-------|---------|--------------|-------------|--------|------|-------|
| R850    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R937    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R852    | 1-216-864-11 | SHORT       | 0      |      |       | R938    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R853    | 1-218-686-11 | METAL CHIP  | 560    | 0.5% | 1/16W | R939    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W |
| R854    | 1-216-827-11 | RES-CHIP    | 3.3K   | 5%   | 1/16W | R940    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W |
| R855    | 1-218-692-11 | METAL CHIP  | 1K     | 0.5% | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R941    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W |
| R856    | 1-218-692-11 | METAL CHIP  | 1K     | 0.5% | 1/16W | R942    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W |
| R857    | 1-218-658-11 | METAL CHIP  | 39     | 0.5% | 1/16W | R943    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W |
| R858    | 1-218-660-91 | METAL CHIP  | 47     | 0.5% | 1/16W | R944    | 1-216-789-11 | RES-CHIP    | 2.2    | 5%   | 1/16W |
| R860    | 1-216-815-11 | RES-CHIP    | 330    | 5%   | 1/16W | R945    | 1-216-864-11 | SHORT       | 0      |      |       |
| R862    | 1-218-658-11 | METAL CHIP  | 39     | 0.5% | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R946    | 1-216-864-11 | SHORT       | 0      |      |       |
| R863    | 1-216-815-11 | RES-CHIP    | 330    | 5%   | 1/16W | R947    | 1-216-864-11 | SHORT       | 0      |      |       |
| R864    | 1-218-660-91 | METAL CHIP  | 47     | 0.5% | 1/16W | R948    | 1-216-829-11 | RES-CHIP    | 4.7K   | 5%   | 1/16W |
| R865    | 1-216-815-11 | RES-CHIP    | 330    | 5%   | 1/16W | R949    | 1-216-864-11 | SHORT       | 0      |      |       |
| R867    | 1-216-815-11 | RES-CHIP    | 330    | 5%   | 1/16W | R950    | 1-216-830-11 | RES-CHIP    | 5.6K   | 5%   | 1/16W |
| R869    | 1-218-658-11 | METAL CHIP  | 39     | 0.5% | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R951    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R871    | 1-218-660-91 | METAL CHIP  | 47     | 0.5% | 1/16W | R952    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R875    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R953    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R876    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R954    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R877    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R956    | 1-216-864-11 | SHORT       | 0      |      |       |
| R878    | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       | R957    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R879    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R958    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R880    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R959    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R885    | 1-216-864-11 | SHORT       | 0      |      |       | R960    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
| R886    | 1-218-692-11 | METAL CHIP  | 1K     | 0.5% | 1/16W | R961    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
| R887    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R964    | 1-218-703-11 | METAL CHIP  | 3K     | 0.5% | 1/16W |
| R889    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R965    | 1-218-690-11 | METAL CHIP  | 820    | 0.5% | 1/16W |
| R891    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R966    | 1-216-845-11 | RES-CHIP    | 100K   | 5%   | 1/16W |
| R892    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R967    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
| R893    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R969    | 1-216-864-11 | SHORT       | 0      |      |       |
| R894    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R970    | 1-216-864-11 | SHORT       | 0      |      |       |
| R895    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R972    | 1-216-864-11 | SHORT       | 0      |      |       |
| R896    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R973    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R897    | 1-216-864-11 | SHORT       | 0      |      |       | R974    | 1-216-864-11 | SHORT       | 0      |      |       |
| R898    | 1-216-864-11 | SHORT       | 0      |      |       | R976    | 1-216-845-11 | RES-CHIP    | 100K   | 5%   | 1/16W |
| R899    | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R977    | 1-218-726-11 | METAL CHIP  | 27K    | 0.5% | 1/16W |
| R900    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R978    | 1-218-726-11 | METAL CHIP  | 27K    | 0.5% | 1/16W |
| R901    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R979    | 1-216-864-11 | SHORT       | 0      |      |       |
| R902    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R982    | 1-216-864-11 | SHORT       | 0      |      |       |
| R903    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R983    | 1-216-864-11 | SHORT       | 0      |      |       |
| R904    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R984    | 1-216-864-11 | SHORT       | 0      |      |       |
| R905    | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R985    | 1-216-864-11 | SHORT       | 0      |      |       |
| R906    | 1-216-815-11 | RES-CHIP    | 330    | 5%   | 1/16W | R986    | 1-216-864-11 | SHORT       | 0      |      |       |
| R907    | 1-216-815-11 | RES-CHIP    | 330    | 5%   | 1/16W | R987    | 1-216-864-11 | SHORT       | 0      |      |       |
| R908    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R988    | 1-216-864-11 | SHORT       | 0      |      |       |
| R911    | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       | R989    | 1-216-864-11 | SHORT       | 0      |      |       |
| R912    | 1-216-817-11 | RES-CHIP    | 470    | 5%   | 1/16W | R990    | 1-216-864-11 | SHORT       | 0      |      |       |
| R913    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R991    | 1-216-864-11 | SHORT       | 0      |      |       |
| R914    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R992    | 1-216-864-11 | SHORT       | 0      |      |       |
| R915    | 1-216-864-11 | SHORT       | 0      |      |       | R993    | 1-216-864-11 | SHORT       | 0      |      |       |
| R916    | 1-216-817-11 | RES-CHIP    | 470    | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R994    | 1-216-864-11 | SHORT       | 0      |      |       |
| R919    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R995    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R920    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R996    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R921    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R997    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R924    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R998    | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R925    | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       | R999    | 1-216-864-11 | SHORT       | 0      |      |       |
| R926    | 1-216-864-11 | SHORT       | 0      |      |       | R1000   | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
| R927    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1002   | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |
| R928    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1003   | 1-216-801-11 | RES-CHIP    | 22     | 5%   | 1/16W |
| R929    | 1-216-829-11 | RES-CHIP    | 4.7K   | 5%   | 1/16W | R1005   | 1-216-864-11 | SHORT       | 0      |      |       |
| R930    | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       | R1007   | 1-216-864-11 | SHORT       | 0      |      |       |
| R931    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R1008   | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |
| R932    | 1-216-864-11 | SHORT       | 0      |      |       | R1023   | 1-216-864-11 | SHORT       | 0      |      |       |
| R933    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R1024   | 1-216-864-11 | SHORT       | 0      |      |       |
| R934    | 1-216-864-11 | SHORT       | 0      |      |       | R1027   | 1-216-864-11 | SHORT       | 0      |      |       |
| R935    | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       | R1028   | 1-216-864-11 | SHORT       | 0      |      |       |
| R936    | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1029   | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |

| Ref.No. | Part No.     | Description | Remark |      |       | Ref.No. | Part No.     | Description | Remark |      |       |
|---------|--------------|-------------|--------|------|-------|---------|--------------|-------------|--------|------|-------|
| R1030   | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W | R1118   | 1-216-864-11 | SHORT       | 0      |      |       |
| R1031   | 1-216-809-11 | RES-CHIP    | 100    | 5%   | 1/16W |         |              |             |        |      |       |
| R1032   | 1-216-832-11 | RES-CHIP    | 8.2K   | 5%   | 1/16W | R1119   | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |             |        |      |       | R1120   | 1-216-864-11 | SHORT       | 0      |      |       |
| R1033   | 1-216-832-11 | RES-CHIP    | 8.2K   | 5%   | 1/16W | R1121   | 1-216-864-11 | SHORT       | 0      |      |       |
| R1034   | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R1122   | 1-216-864-11 | SHORT       | 0      |      |       |
| R1035   | 1-216-825-11 | RES-CHIP    | 2.2K   | 5%   | 1/16W | R1123   | 1-216-864-11 | SHORT       | 0      |      |       |
| R1036   | 1-216-841-11 | RES-CHIP    | 47K    | 5%   | 1/16W |         |              |             |        |      |       |
| R1037   | 1-216-033-00 | RES-CHIP    | 220    | 5%   | 1/10W | R1124   | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |             |        |      |       | R1125   | 1-216-864-11 | SHORT       | 0      |      |       |
| R1038   | 1-216-841-11 | RES-CHIP    | 47K    | 5%   | 1/16W | R1126   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R1039   | 1-216-033-00 | RES-CHIP    | 220    | 5%   | 1/10W | R1127   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R1040   | 1-216-830-11 | RES-CHIP    | 5.6K   | 5%   | 1/16W | R1128   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R1041   | 1-216-845-11 | RES-CHIP    | 100K   | 5%   | 1/16W |         |              |             |        |      |       |
| R1042   | 1-216-830-11 | RES-CHIP    | 5.6K   | 5%   | 1/16W | R1129   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
|         |              |             |        |      |       | R1130   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |
| R1043   | 1-216-823-11 | RES-CHIP    | 1.5K   | 5%   | 1/16W | R1131   | 1-216-817-11 | RES-CHIP    | 470    | 5%   | 1/16W |
| R1044   | 1-216-827-11 | RES-CHIP    | 3.3K   | 5%   | 1/16W | R1132   | 1-216-817-11 | RES-CHIP    | 470    | 5%   | 1/16W |
| R1045   | 1-217-671-11 | RES-CHIP    | 1      | 5%   | 1/10W | R1133   | 1-216-817-11 | RES-CHIP    | 470    | 5%   | 1/16W |
| R1046   | 1-217-671-11 | RES-CHIP    | 1      | 5%   | 1/10W |         |              |             |        |      |       |
| R1047   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W | R1134   | 1-218-688-11 | METAL CHIP  | 680    | 0.5% | 1/16W |
|         |              |             |        |      |       | R1135   | 1-218-698-11 | METAL CHIP  | 1.8K   | 0.5% | 1/16W |
| R1052   | 1-216-829-11 | RES-CHIP    | 4.7K   | 5%   | 1/16W | R1136   | 1-218-702-11 | METAL CHIP  | 2.7K   | 0.5% | 1/16W |
| R1054   | 1-218-703-11 | METAL CHIP  | 3K     | 0.5% | 1/16W | R1138   | 1-216-864-11 | SHORT       | 0      |      |       |
| R1055   | 1-218-690-11 | METAL CHIP  | 820    | 0.5% | 1/16W | R1139   | 1-216-864-11 | SHORT       | 0      |      |       |
| R1056   | 1-216-845-11 | RES-CHIP    | 100K   | 5%   | 1/16W |         |              |             |        |      |       |
| R1057   | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W | R1140   | 1-216-864-11 | SHORT       | 0      |      |       |
|         |              |             |        |      |       | R1141   | 1-216-829-11 | RES-CHIP    | 4.7K   | 5%   | 1/16W |
| R1059   | 1-216-864-11 | SHORT       | 0      |      |       | R1142   | 1-216-821-11 | RES-CHIP    | 1K     | 5%   | 1/16W |
| R1060   | 1-216-864-11 | SHORT       | 0      |      |       | R1143   | 1-218-710-11 | METAL CHIP  | 5.6K   | 0.5% | 1/16W |
| R1062   | 1-216-864-11 | SHORT       | 0      |      |       | R1144   | 1-216-813-11 | RES-CHIP    | 220    | 5%   | 1/16W |
| R1063   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |         |              |             |        |      |       |
| R1064   | 1-216-864-11 | SHORT       | 0      |      |       | R1145   | 1-218-658-11 | METAL CHIP  | 39     | 0.5% | 1/16W |
| R1066   | 1-216-845-11 | RES-CHIP    | 100K   | 5%   | 1/16W | R1146   | 1-216-864-11 | SHORT       | 0      |      |       |
| R1067   | 1-218-726-11 | METAL CHIP  | 27K    | 0.5% | 1/16W |         |              |             |        |      |       |
| R1068   | 1-218-726-11 | METAL CHIP  | 27K    | 0.5% | 1/16W |         |              |             |        |      |       |
| R1069   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1072   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       |         |              |             |        |      |       |
| R1073   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1074   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1075   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1076   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1077   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       |         |              |             |        |      |       |
| R1078   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1079   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1080   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1081   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1082   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       |         |              |             |        |      |       |
| R1083   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1084   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1085   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |         |              |             |        |      |       |
| R1086   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |         |              |             |        |      |       |
| R1087   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       |         |              |             |        |      |       |
| R1088   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |         |              |             |        |      |       |
| R1095   | 1-218-703-11 | METAL CHIP  | 3K     | 0.5% | 1/16W |         |              |             |        |      |       |
| R1096   | 1-218-690-11 | METAL CHIP  | 820    | 0.5% | 1/16W |         |              |             |        |      |       |
| R1097   | 1-216-845-11 | RES-CHIP    | 100K   | 5%   | 1/16W |         |              |             |        |      |       |
| R1098   | 1-216-805-11 | RES-CHIP    | 47     | 5%   | 1/16W |         |              |             |        |      |       |
|         |              |             |        |      |       |         |              |             |        |      |       |
| R1100   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1101   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1103   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1104   | 1-216-833-11 | RES-CHIP    | 10K    | 5%   | 1/16W |         |              |             |        |      |       |
| R1105   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       |         |              |             |        |      |       |
| R1107   | 1-216-845-11 | RES-CHIP    | 100K   | 5%   | 1/16W |         |              |             |        |      |       |
| R1108   | 1-218-726-11 | METAL CHIP  | 27K    | 0.5% | 1/16W |         |              |             |        |      |       |
| R1109   | 1-218-726-11 | METAL CHIP  | 27K    | 0.5% | 1/16W |         |              |             |        |      |       |
| R1110   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1113   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
|         |              |             |        |      |       |         |              |             |        |      |       |
| R1114   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1115   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1116   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |
| R1117   | 1-216-864-11 | SHORT       | 0      |      |       |         |              |             |        |      |       |

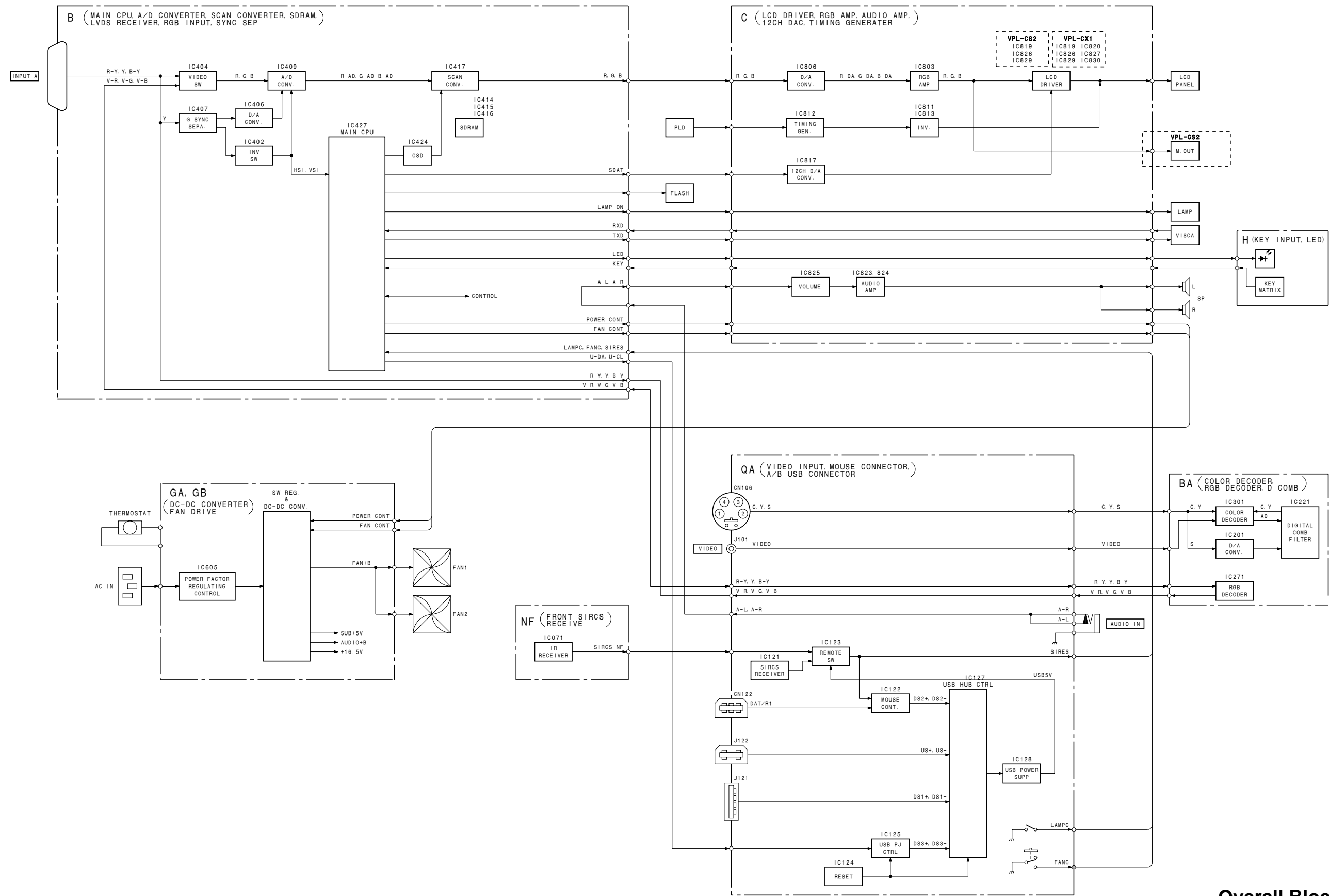


| Ref.No. | Part No.       | Description               | Remark |        |       |
|---------|----------------|---------------------------|--------|--------|-------|
| *****   |                |                           |        |        |       |
|         | A-1375-195-A   | H COMPL                   | *****  |        |       |
|         |                | <CAPACITOR>               |        |        |       |
| C001    | 1-164-004-11   | CERAMIC CHIP              | 0.1UF  | 10.00% | 25V   |
|         |                | <CONNECTOR>               |        |        |       |
| CN001   | * 1-764-007-11 | PIN,CONNECTOR (SMD)       | 12P    |        |       |
|         |                | <DIODE>                   |        |        |       |
| D001    | 8-719-045-61   | DIODE SEC1901C            |        |        |       |
| D002    | 8-719-045-61   | DIODE SEC1901C            |        |        |       |
| D003    | 8-719-045-53   | DIODE SEC1801C            |        |        |       |
| D004    | 8-719-914-43   | DIODE DAN202K-T-146       |        |        |       |
| D005    | 8-719-914-43   | DIODE DAN202K-T-146       |        |        |       |
| D006    | 8-719-914-43   | DIODE DAN202K-T-146       |        |        |       |
| D007    | 8-719-914-43   | DIODE DAN202K-T-146       |        |        |       |
| D008    | 8-719-045-51   | DIODE SEC2422C            |        |        |       |
| D009    | 8-719-914-44   | DIODE DAP202K-T-146       |        |        |       |
| D010    | 8-719-914-44   | DIODE DAP202K-T-146       |        |        |       |
| D011    | 8-719-914-44   | DIODE DAP202K-T-146       |        |        |       |
| D012    | 8-719-914-44   | DIODE DAP202K-T-146       |        |        |       |
|         |                | <TRANSISTOR>              |        |        |       |
| Q001    | 8-729-027-38   | TRANSISTOR DTA144EKA-T146 |        |        |       |
|         |                | <RESISTOR>                |        |        |       |
| R001    | 1-216-073-00   | RES-CHIP                  | 10K    | 5%     | 1/10W |
| R002    | 1-216-073-00   | RES-CHIP                  | 10K    | 5%     | 1/10W |
| R003    | 1-216-049-11   | RES-CHIP                  | 1K     | 5%     | 1/10W |
| R004    | 1-216-083-00   | RES-CHIP                  | 27K    | 5%     | 1/10W |
| R005    | 1-216-075-00   | RES-CHIP                  | 12K    | 5%     | 1/10W |
| R006    | 1-216-069-00   | RES-CHIP                  | 6.8K   | 5%     | 1/10W |
| R007    | 1-216-063-91   | RES-CHIP                  | 3.9K   | 5%     | 1/10W |
| R008    | 1-216-059-00   | RES-CHIP                  | 2.7K   | 5%     | 1/10W |
| R009    | 1-216-057-00   | RES-CHIP                  | 2.2K   | 5%     | 1/10W |
| R010    | 1-216-053-00   | RES-CHIP                  | 1.5K   | 5%     | 1/10W |
| R011    | 1-216-055-00   | RES-CHIP                  | 1.8K   | 5%     | 1/10W |
| R012    | 1-216-037-00   | RES-CHIP                  | 330    | 5%     | 1/10W |
| R013    | 1-216-059-00   | RES-CHIP                  | 2.7K   | 5%     | 1/10W |
| R014    | 1-216-057-00   | RES-CHIP                  | 2.2K   | 5%     | 1/10W |
| R015    | 1-216-053-00   | RES-CHIP                  | 1.5K   | 5%     | 1/10W |
| R016    | 1-216-055-00   | RES-CHIP                  | 1.8K   | 5%     | 1/10W |
|         |                | <SWITCH>                  |        |        |       |
| S001    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S002    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S003    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S004    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S005    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S006    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S007    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S008    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S009    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S010    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S011    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |
| S012    | 1-771-105-11   | SWITCH,TACTILE            |        |        |       |

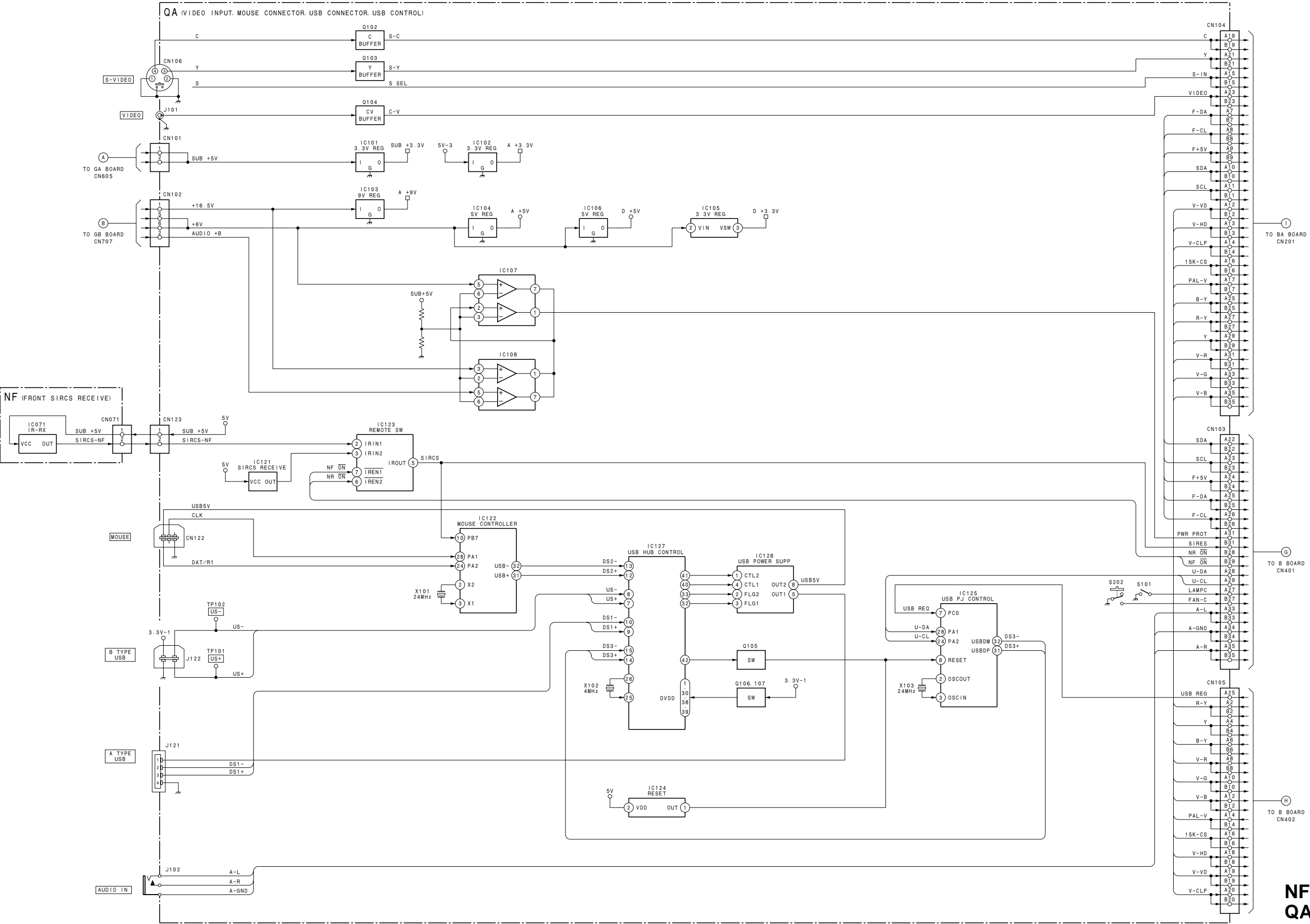
| Ref.No. | Part No.       | Description   | Remark |
|---------|----------------|---|--------|
| *****   |                |   |        |
|         |                | ACCESSORIES   | *****  |
|         | 1-476-215-11   | REMOTE COMMANDER (RM-PJM10)   |        |
|         | 9-885-005-85   | COVER,BATTERY(RM-PJM10)   |        |
|         | △ 1-777-359-11 | CORD,POWER(13A/125V) (For JAPAN)  |        |
|         | △ 1-534-827-14 | CORD,POWER(10A/125V) (For UC)   |        |
|         | 1-757-350-11   | CORD,CONNECTION   |        |
|         | △ 1-777-649-11 | CORD,POWER(10A/250V)<br>(For Continental Europe)  |        |
|         | △ 1-782-929-11 | CORD,POWER SUPPLY(BS-3P)<br>(10A/250V)<br>(For UK,Ireland,Australia,Newzealand)                 |        |
|         | 1-790-081-11   | CABLE,USB   |        |
|         | 1-791-992-11   | CABLE ASSY(15PDSUBCONNECTORX2)  |        |
|         | 1-792-424-11   | CORD,CONNECTION   |        |
|         | * 4-074-717-01 | FILTER  |        |
|         | 4-079-834-01   | OPERATING,INSTRUCTIONS<br>(JAPANESE / CHINESE)  |        |
|         | 4-079-834-11   | OPERATING,INSTRUCTIONS<br>(ENGLISH / FRENCH / SPANISH)  |        |
|         | 4-079-834-21   | OPERATING,INSTRUCTIONS<br>(ITALIAN / GERMAN)  |        |
|         | 4-079-835-01   | QUICK,REFERENCE CARD<br>(JAPANESE / ENGLISH / FRENCH /<br>SPANISH / ITALIAN / GERMAN / CHINESE) |        |



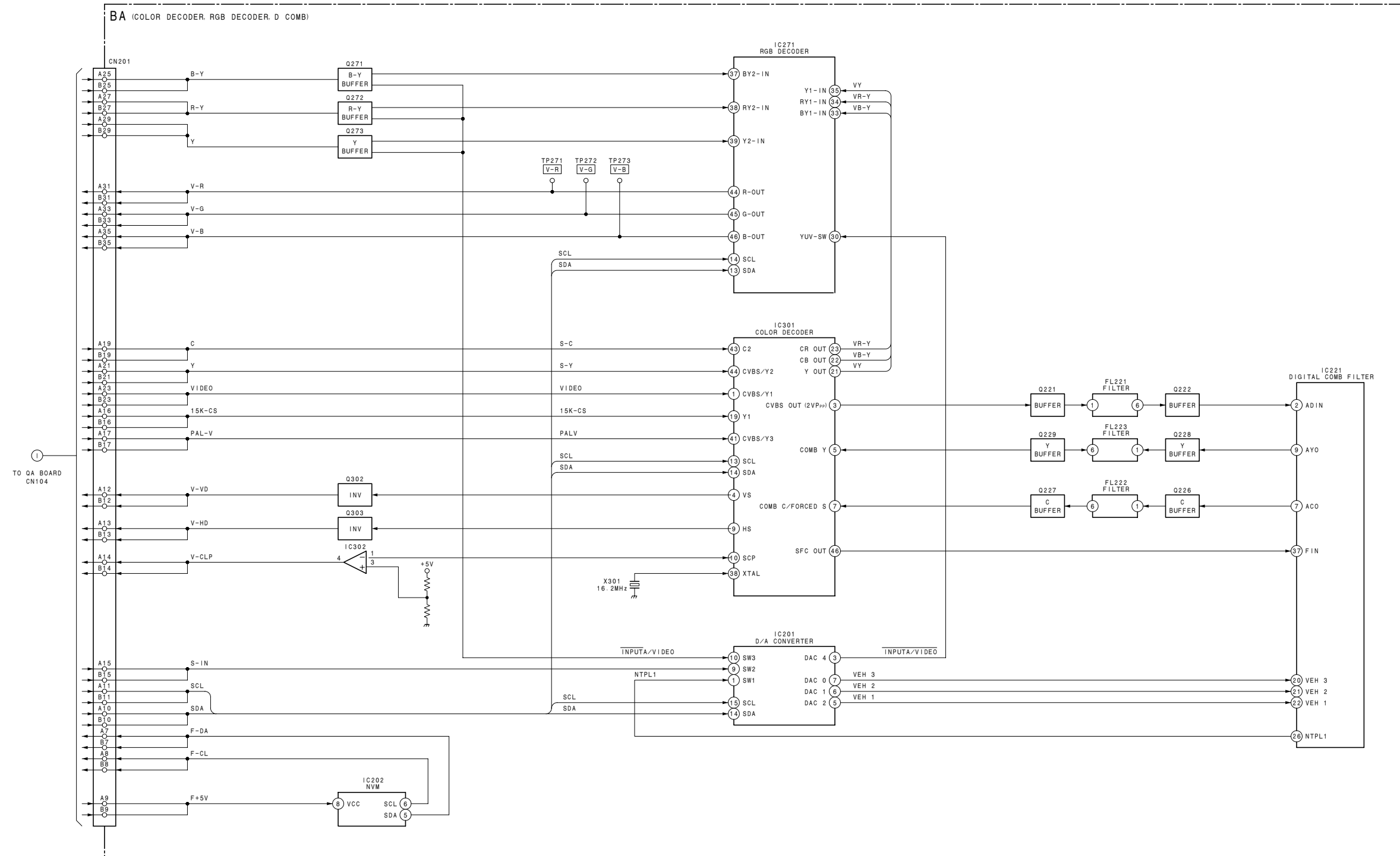
Section 7  
Block Diagrams



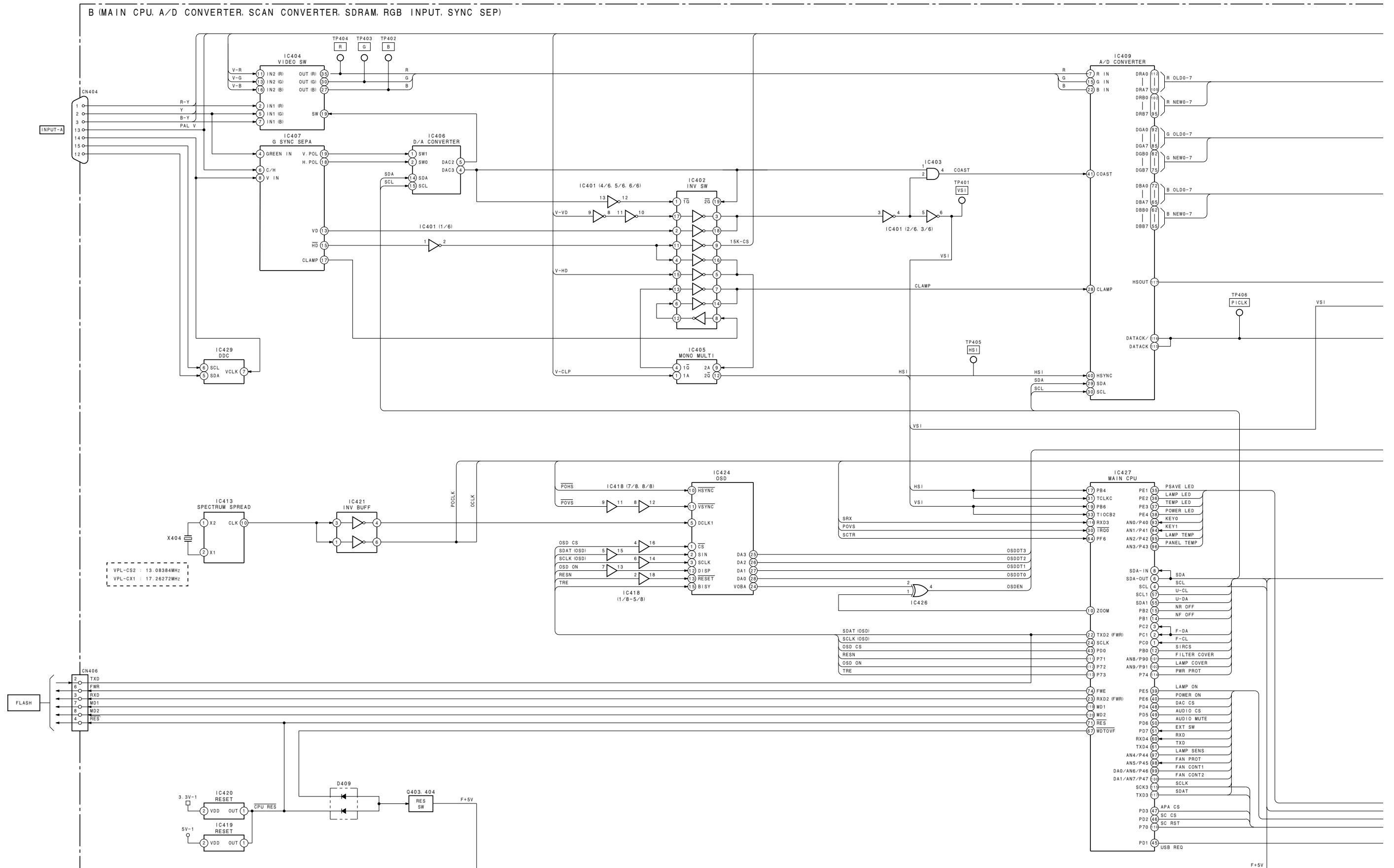
Overall Block

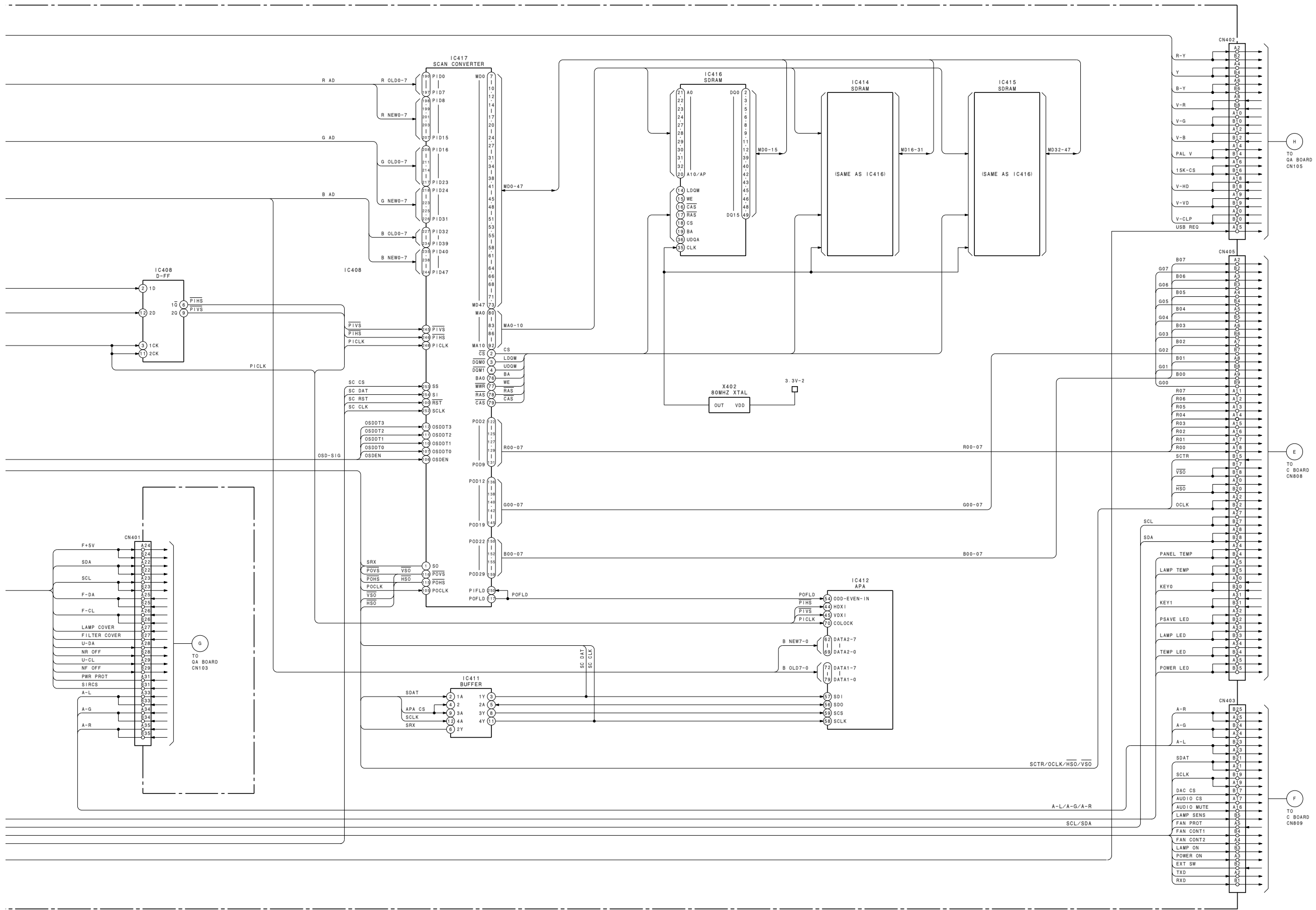


NF Block  
QA Block



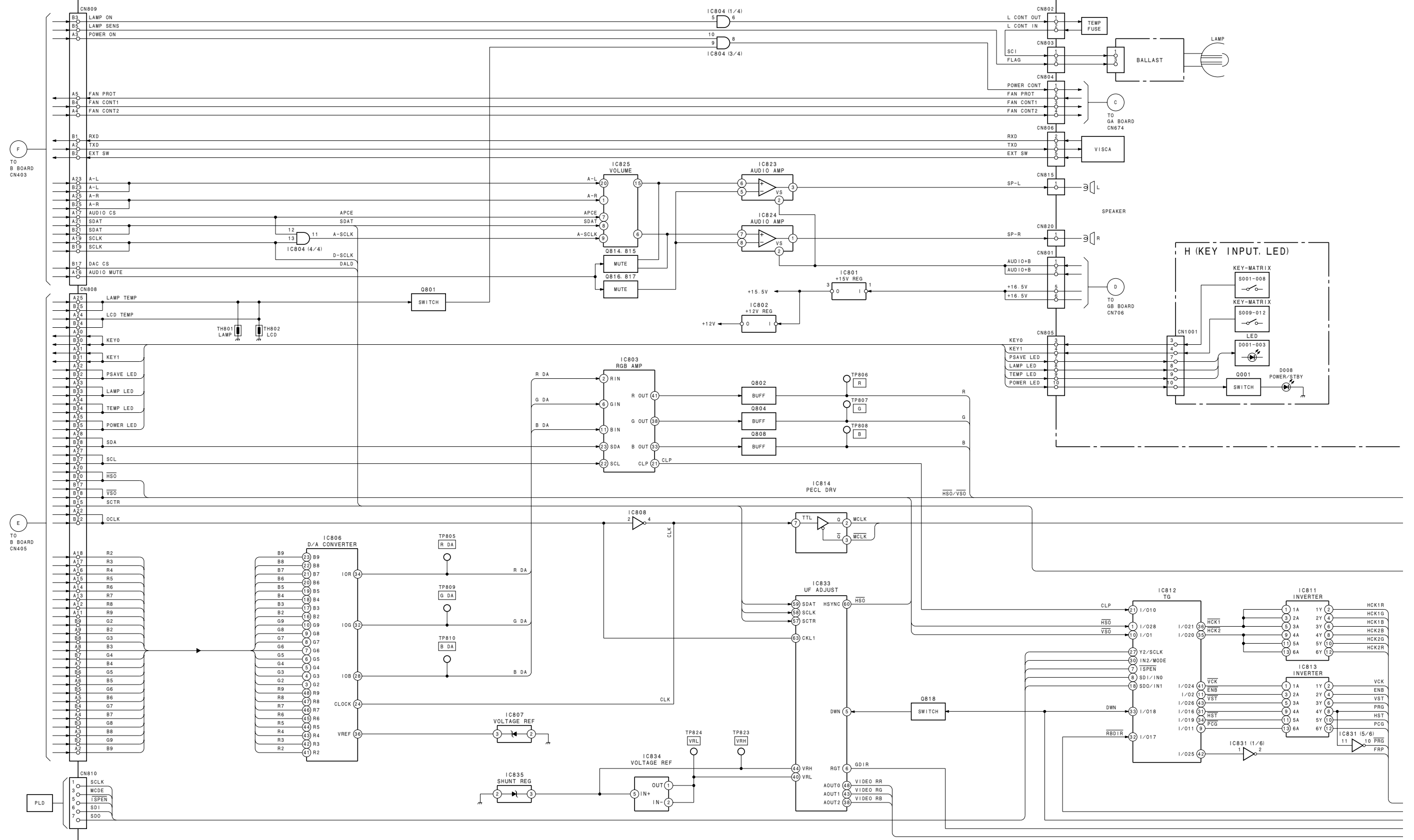
BA Block





## For VPL-CS2

C (LCD DRIVE, RGB AMP, AUDIO AMP, 12CH DAC, TIMING GENERATER)

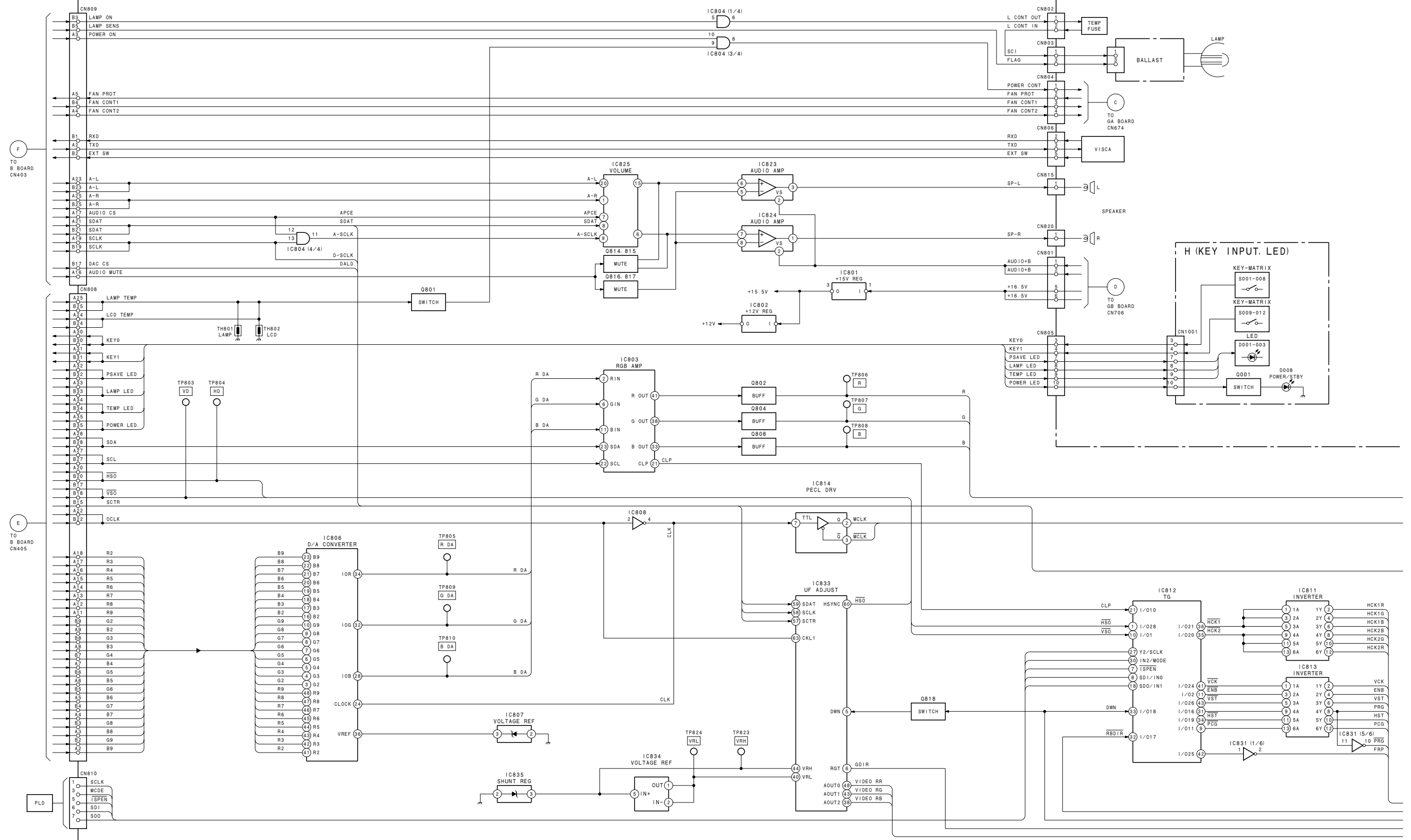


**C, H**      **C, H**

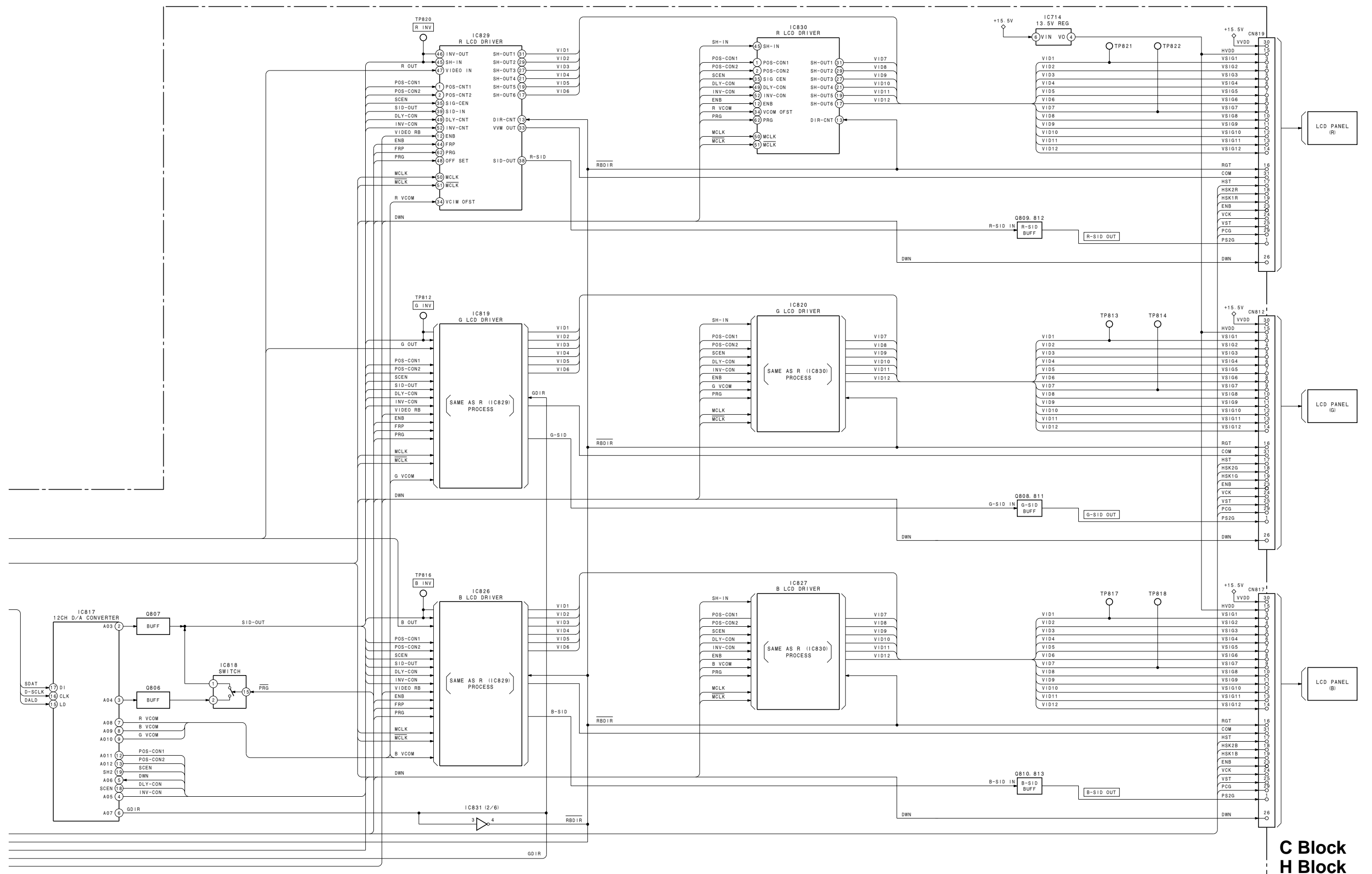


## For VPL-CX1

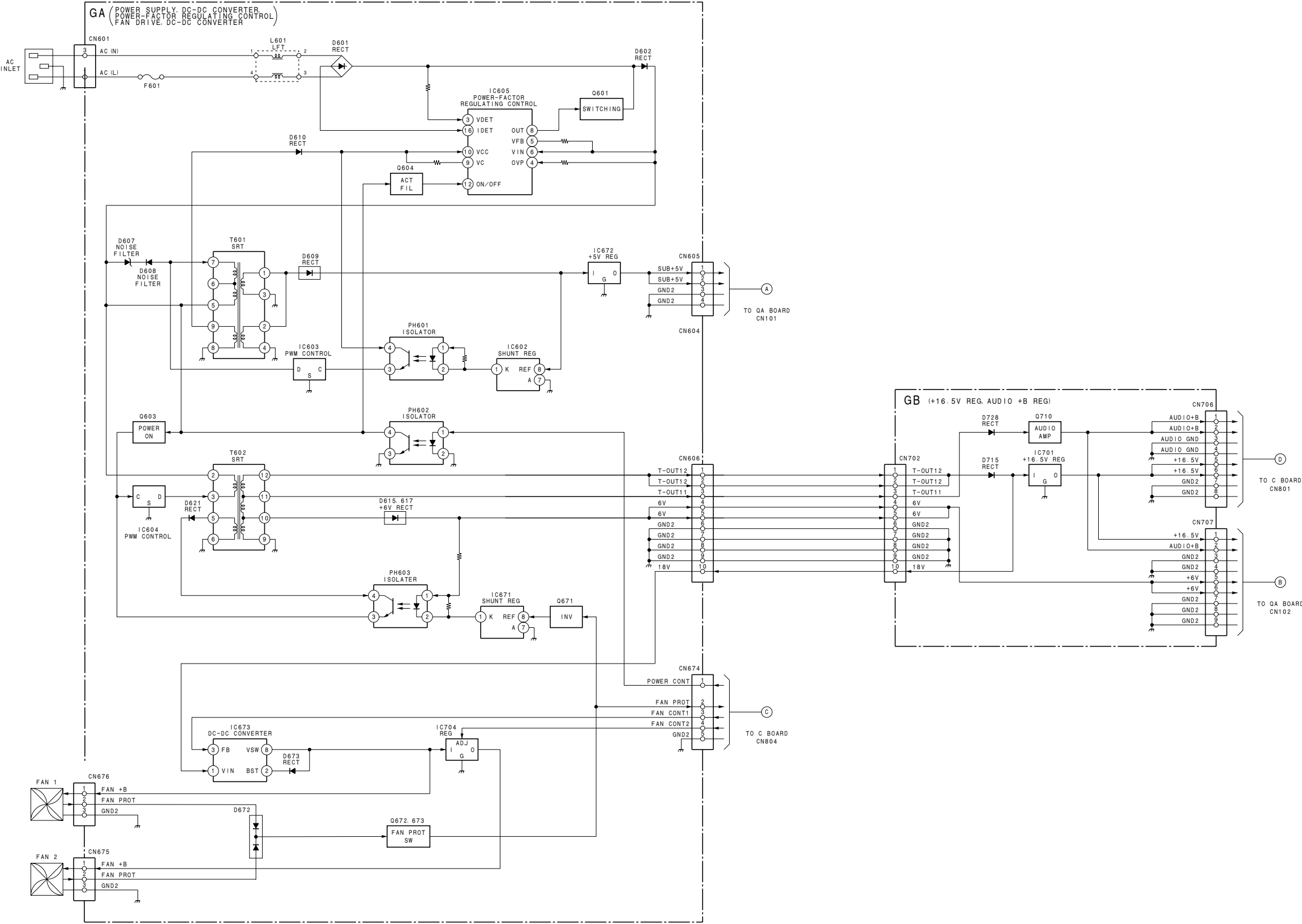
C (LCD DRIVE, RGB AMP, AUDIO AMP, 12CH DAC, TIMING GENERATER)










C Block  
H Block






GA Block  
GB Block

Section 8  
Diagrams


- Note:**
- Parts marked “ \* ” differ according to the model/destination. Refer to the mount table for each function.
  - The parts marked “ # ” on schematic diagrams are not mounted.
  - All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\mu\text{F}$  50WV or less are not indicated except for electrolytics.
  - All electrolytics are in 50 V unless otherwise specified.
  -  : fusible resistor
  -  : nonflammable resistor
  - $\Delta$  : internal component
  -  : panel designation and adjustment for repair
  - Caution when replacing chip parts  
New parts must be attached after removal of the chip.  
Be careful not to heat the minus side of a tantalum capacitor, because it is easily damaged by the heat.

|                       |       |                            |
|-----------------------|-------|----------------------------|
| Reference information |       |                            |
| RESISTOR              | RN    | : METAL FILM               |
|                       | RC    | : SOLID                    |
|                       | FPRD  | : NONFLAMMABLE CARBON      |
|                       | FUSE  | : NONFLAMMABLE FUSIBLE     |
|                       | RS    | : NONFLAMMABLE METAL OXIDE |
|                       | RB    | : NONFLAMMABLE CEMENT      |
|                       | RW    | : NONFLAMMABLE WIREWOUND   |
|                       | ※     | : ADJUSTMENT RESISTOR      |
|                       |       |                            |
| COIL                  | LF-8L | : MICRO INDUCTOR           |
| CAPACITOR             | TA    | : TANTALUM                 |
|                       | PS    | : STYROL                   |
|                       | PP    | : POLYPROPYLENE            |
|                       | PT    | : MYLAR                    |
|                       | MPS   | : METALIZED POLYESTER      |
|                       | MPP   | : METALIZED POLYPROPYLENE  |
|                       | ALB   | : BIPOLAR                  |
|                       | ALT   | : HIGH TEMPERATURE         |
|                       | ALR   | : HIGH RIPPLE              |

- [Measuring conditions, voltage and waveform]**
- A voltage value is the reference value between the measurement point and the earth, when the NTSC color bar signal is received from the color bar generator (digital multi-meter used: 10 M ohms/ V DC).
  - A voltage value is the reference value between the measurement point and the earth, when the NTSC color bar signal and RGB color bar signal are received from the color bar generator (digital multi-meter used: 10 M ohms/V DC).
  - Unit of voltage is V (volt).
  -  : B+line
  -  : B- line
  - Voltage variations may occur due to normal production tolerances.
  - No mark : NTSC (3.58 MHz) color bar signal.
  - ( ) : PAL color bar signal is received.
  - < > : SECAM color bar signal is received.
  - << >> : NTSC (4.43 MHz) color bar signal is received.
  - [ ] : RGB color bar signal is received.
  - ★ : Measurement disabled.
  - Circled numbers indicate the reference waveform.
  -  : Signal path.

The components identified marked  $\Delta$  are critical for safety.  
Replace only with the part number specified.

Les composants identifiés par la marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.



**NOTE:**  
The circuit indicated as shown on the left contains high voltages of over 600 Vp-p. Take care to avoid electric shock during inspection or repair work.

8-1. Frame Schematic Diagram

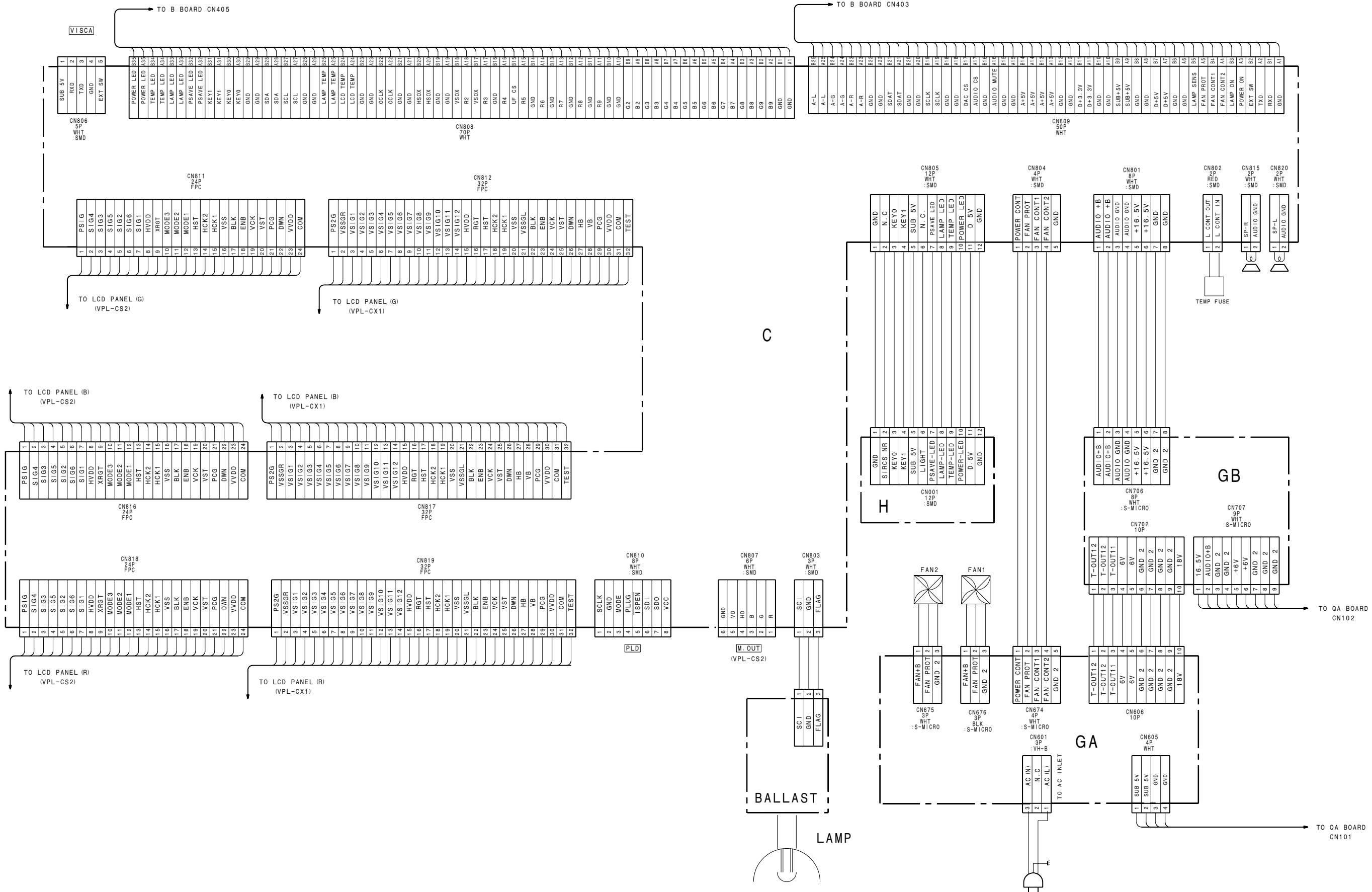
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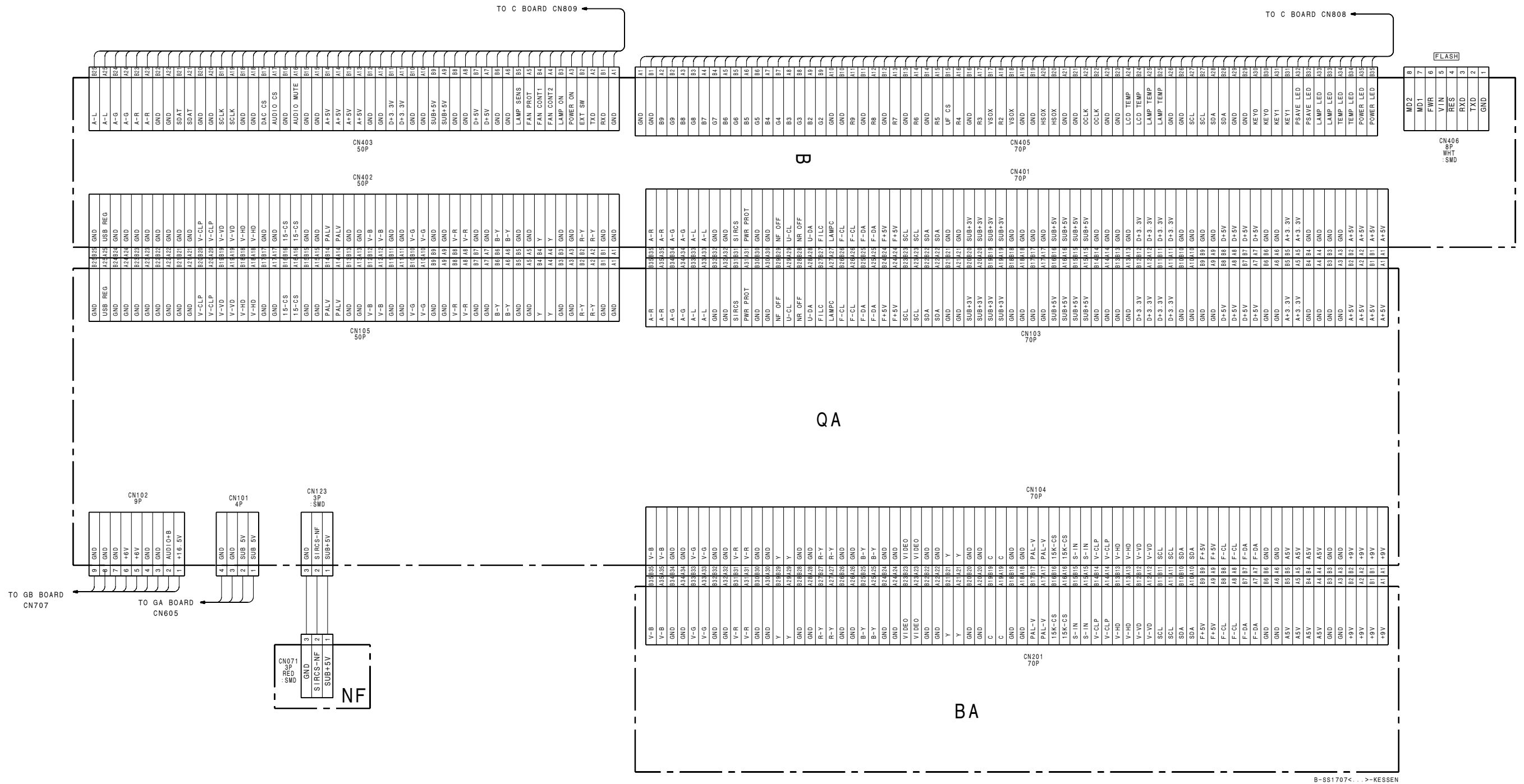
2

3

4

5





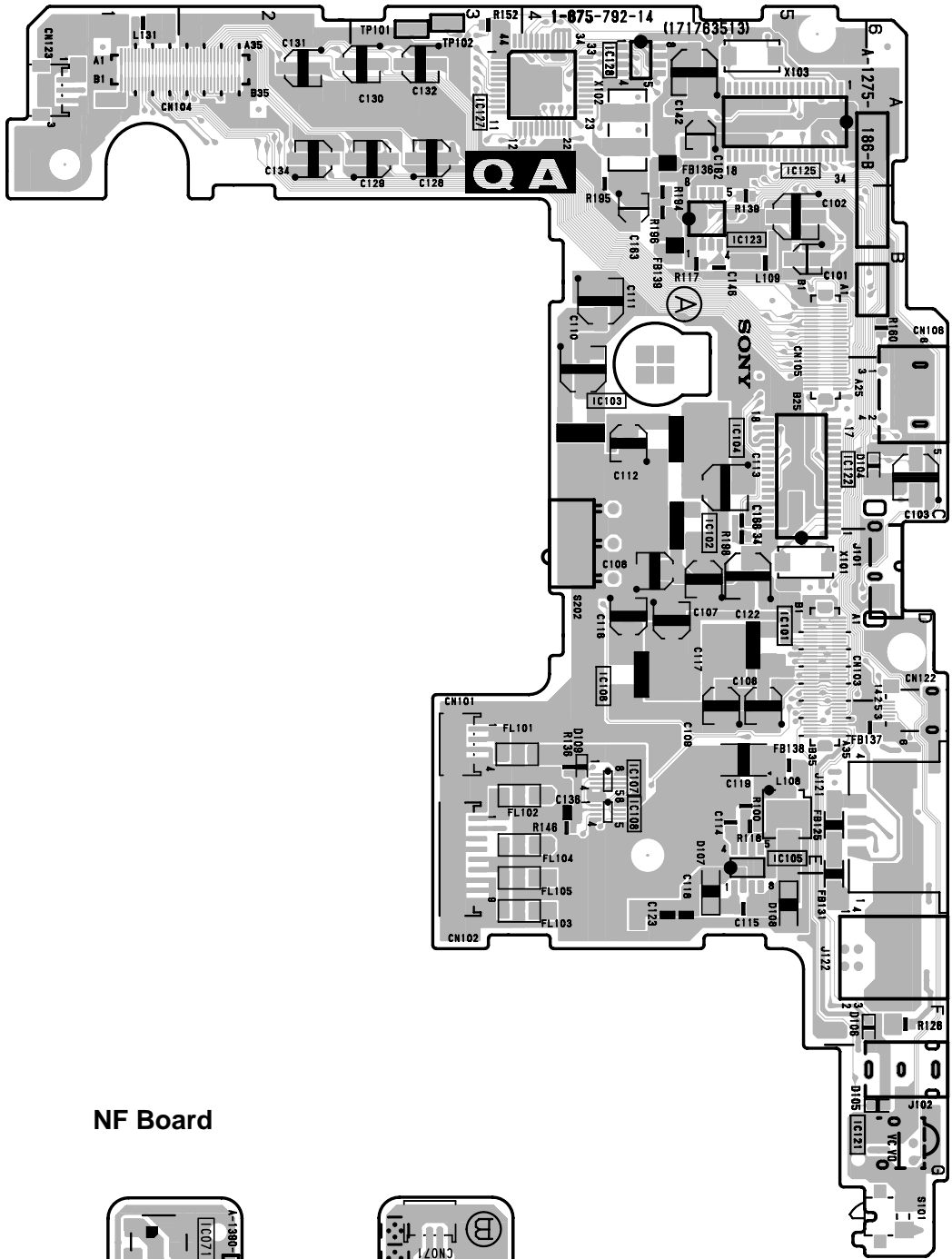
8-2. Schematic Diagrams and Printed Wiring Boards

QA Board

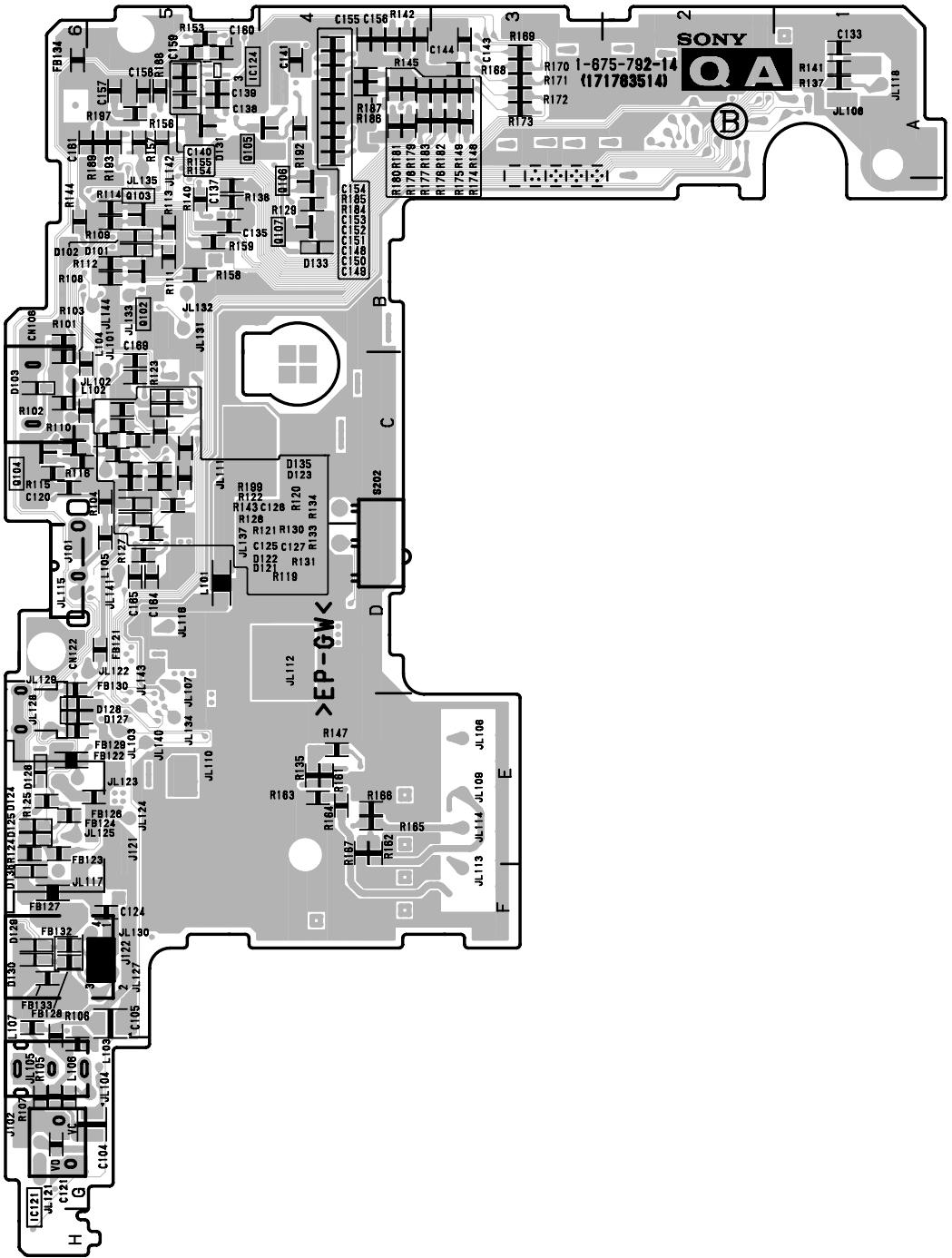
QA Board  
1-675-792-14

- |       |      |
|-------|------|
| IC101 | D-5  |
| IC102 | D-5  |
| IC103 | C-4  |
| IC104 | C-5  |
| IC105 | E-5  |
| IC106 | D-4  |
| IC107 | E-4  |
| IC108 | E-4  |
| IC121 | G-5  |
| IC122 | C-5  |
| IC123 | B-5  |
| IC124 | *A-5 |
| IC125 | A-5  |
| IC127 | A-3  |
| IC128 | A-4  |
| Q102  | *B-5 |
| Q103  | *B-5 |
| Q104  | *C-6 |
| Q105  | *A-5 |
| Q106  | *B-4 |
| Q107  | *B-4 |
| D101  | *B-5 |
| D102  | *B-6 |
| D103  | *C-6 |
| D104  | C-5  |
| D105  | G-5  |
| D106  | F-5  |
| D107  | E-5  |
| D108  | F-5  |
| D109  | E-4  |
| D121  | *D-4 |
| D122  | *D-4 |
| D123  | *C-4 |
| D124  | *E-6 |
| D125  | *E-6 |
| D126  | *E-6 |
| D127  | *E-5 |
| D128  | *E-5 |
| D129  | *F-6 |
| D130  | *F-6 |
| D131  | *A-5 |
| D133  | *B-4 |
| D135  | *C-4 |
| TP101 | A-3  |
| TP102 | A-3  |
| X101  | D-5  |
| X102  | A-4  |
| X103  | A-5  |

\*:B Side mount

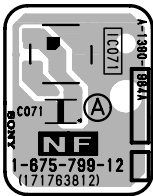


QA -A SIDE-  
SUFFIX: -14

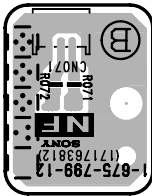


QA -B SIDE-  
SUFFIX: -14

NF Board

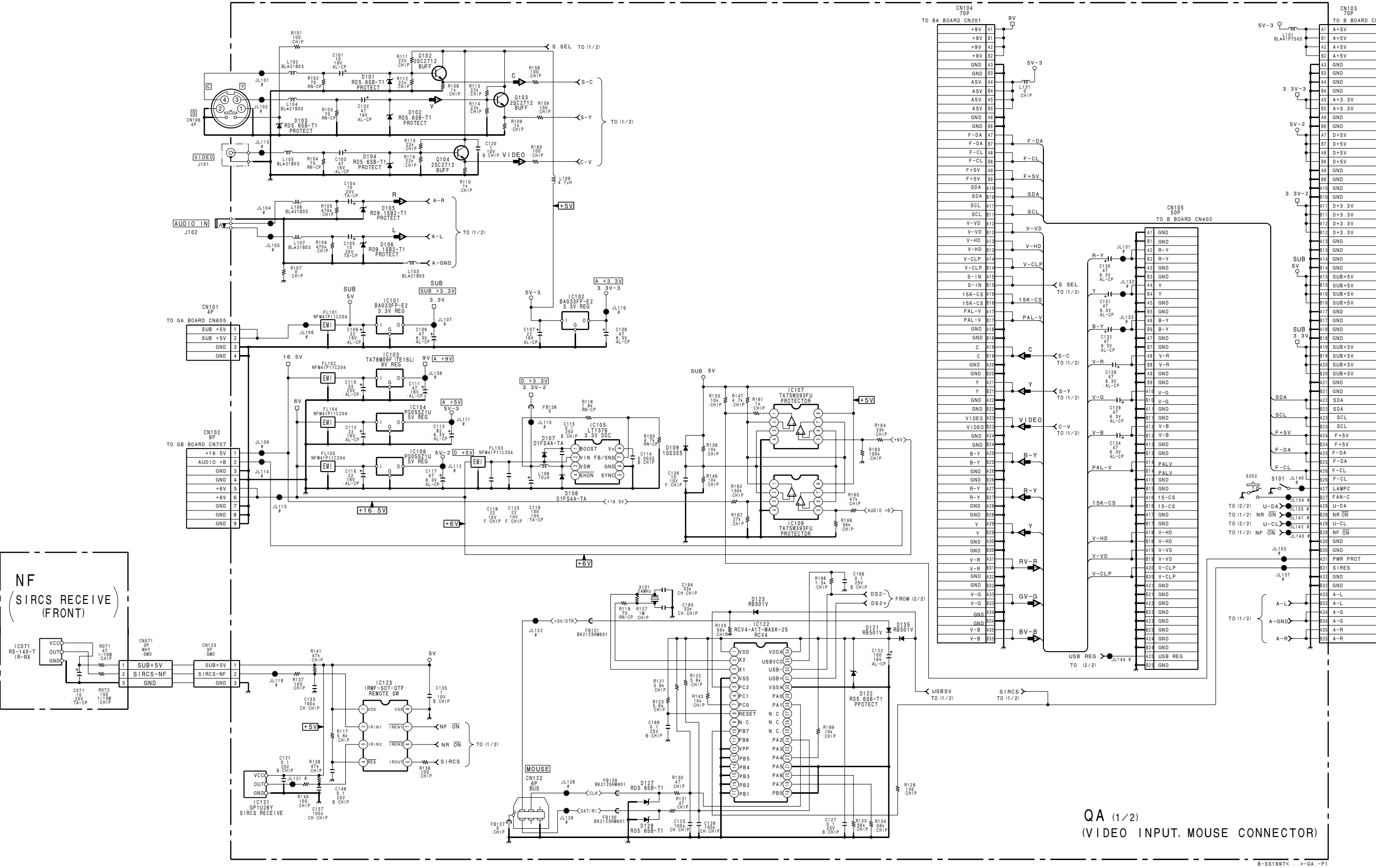


NF -A SIDE-  
SUFFIX: -12

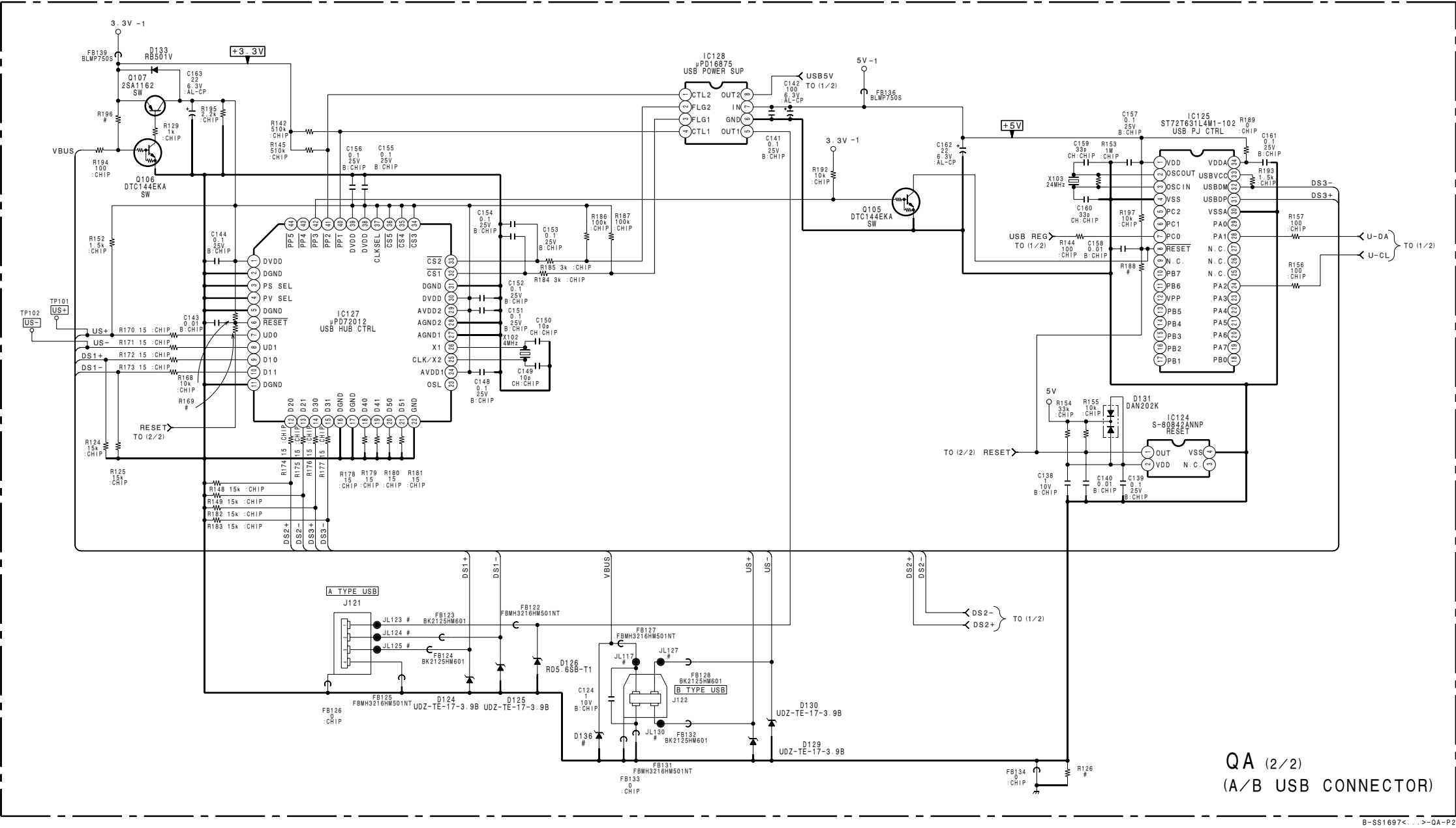


NF -B SIDE-  
SUFFIX: -12

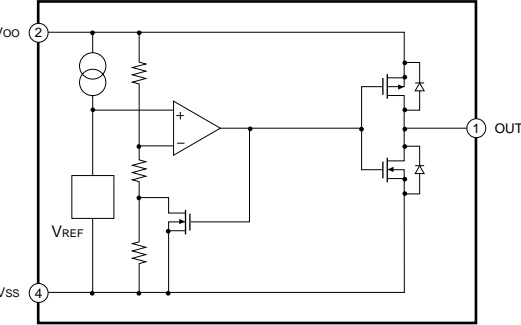
• Refer to page 8-4 for Printed Wiring Board



• Refer to page 8-4 for Printed Wiring Board



S-80842ANNP (IC124)





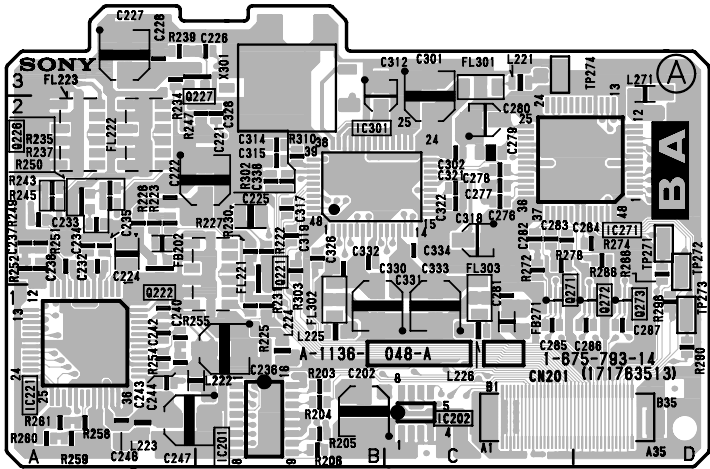
BA Board

BA Board

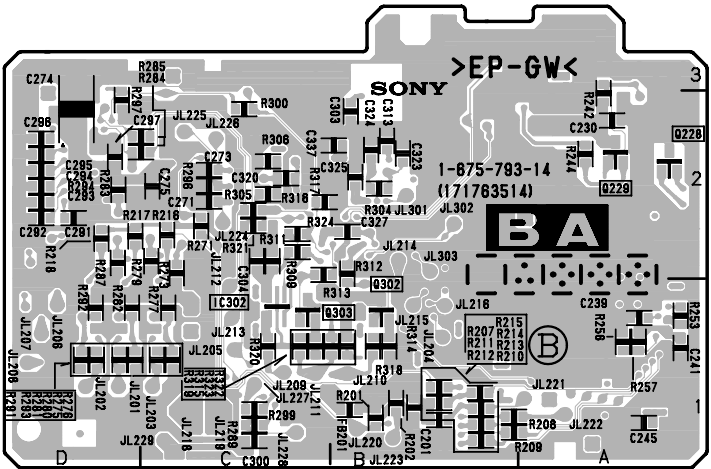
1-675-793-14

|       |       |
|-------|-------|
| IC201 | B-1   |
| IC202 | C-1   |
| IC221 | A-1   |
| IC271 | D-2   |
| IC301 | B-2   |
| IC302 | * C-1 |
| Q221  | B-2   |
| Q222  | A-1   |
| Q226  | A-2   |
| Q227  | B-2   |
| Q228  | * A-2 |
| Q229  | * A-2 |
| Q271  | C-1   |
| Q272  | D-1   |
| Q273  | D-1   |
| Q302  | * B-1 |
| Q303  | * B-1 |
| TP271 | D-2   |
| TP272 | D-2   |
| TP273 | D-1   |
| TP274 | D-3   |
| X301  | B-3   |

\*:B Side mount

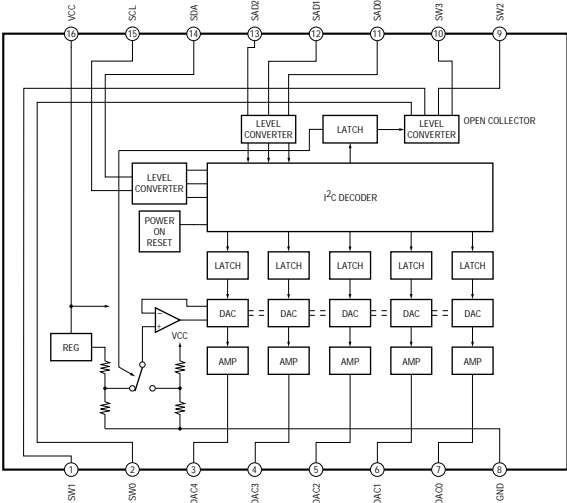


BA -A SIDE-  
SUFFIX: -14

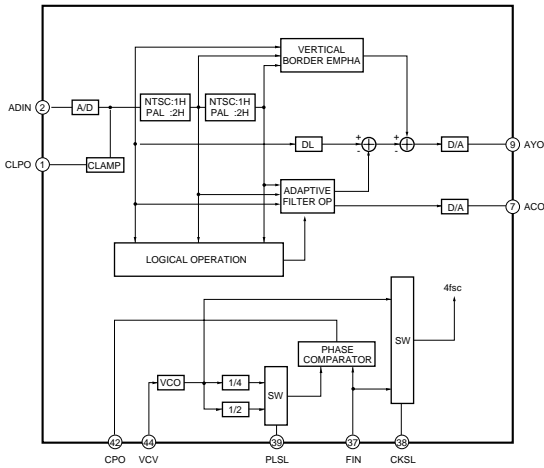


BA -B SIDE-  
SUFFIX: -14

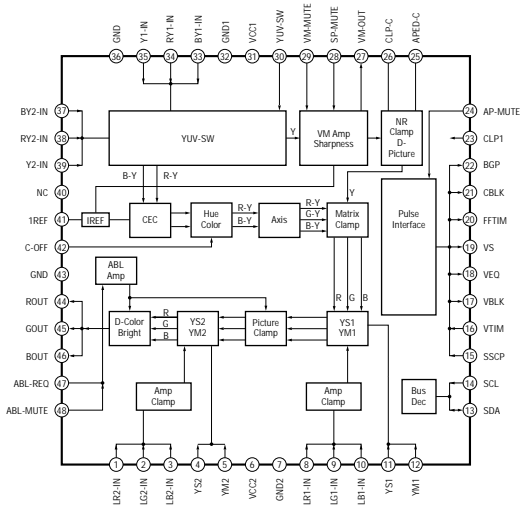
CXA1875AM-T4 (IC201)



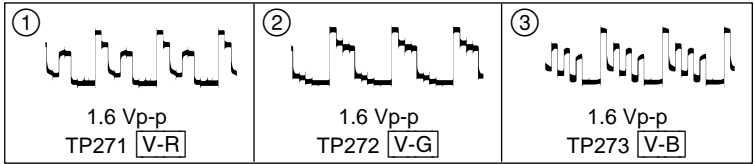
CXD2064Q-T6 (IC221)



CXA1839Q-T6 (IC271)



BA Board Waveforms



- Refer to page 8-7 for Printed Wiring Board
- Refer to page 8-7 for Waveforms
- Refer to page 8-7 for IC Block Diagrams

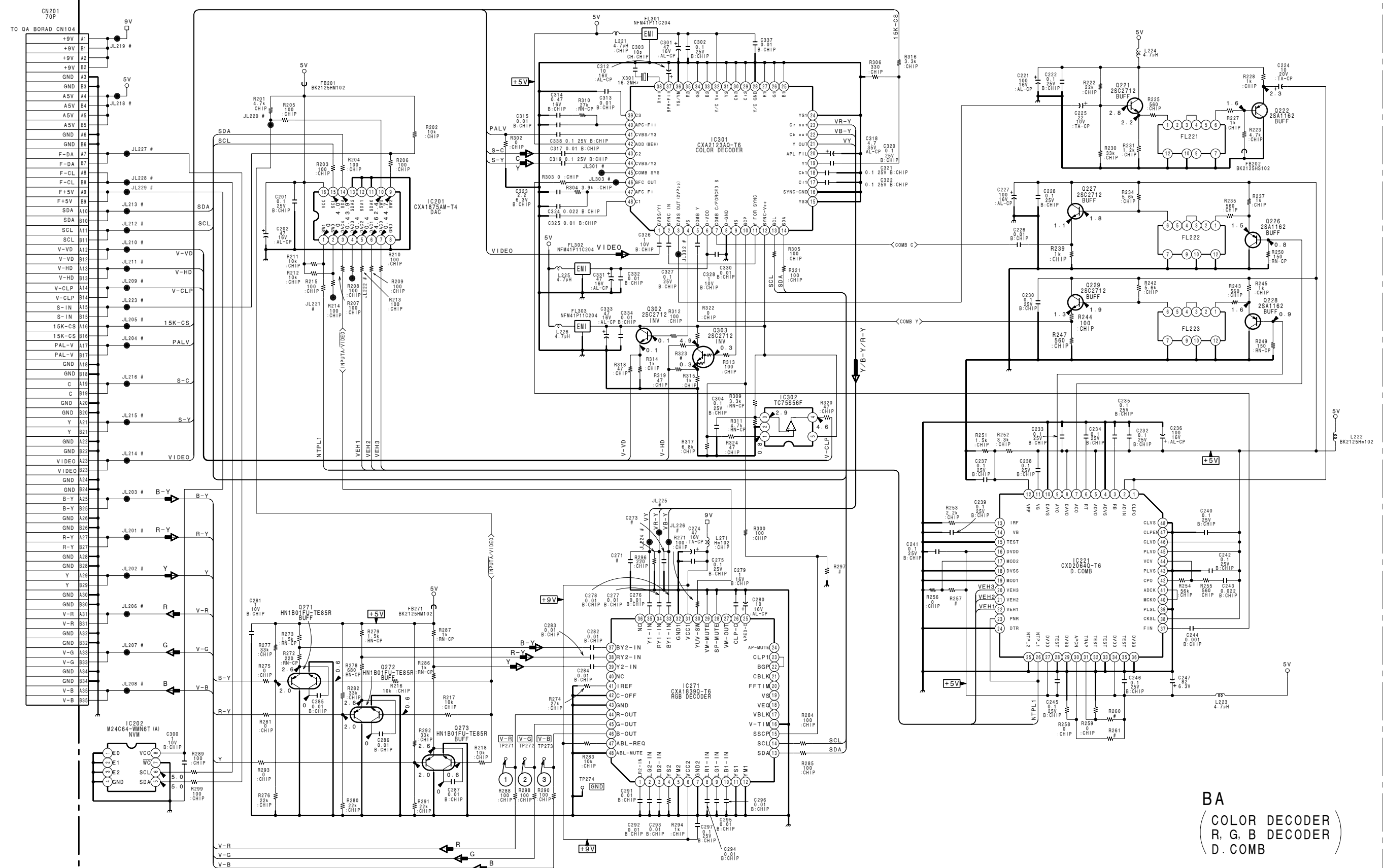
1

2

3

4

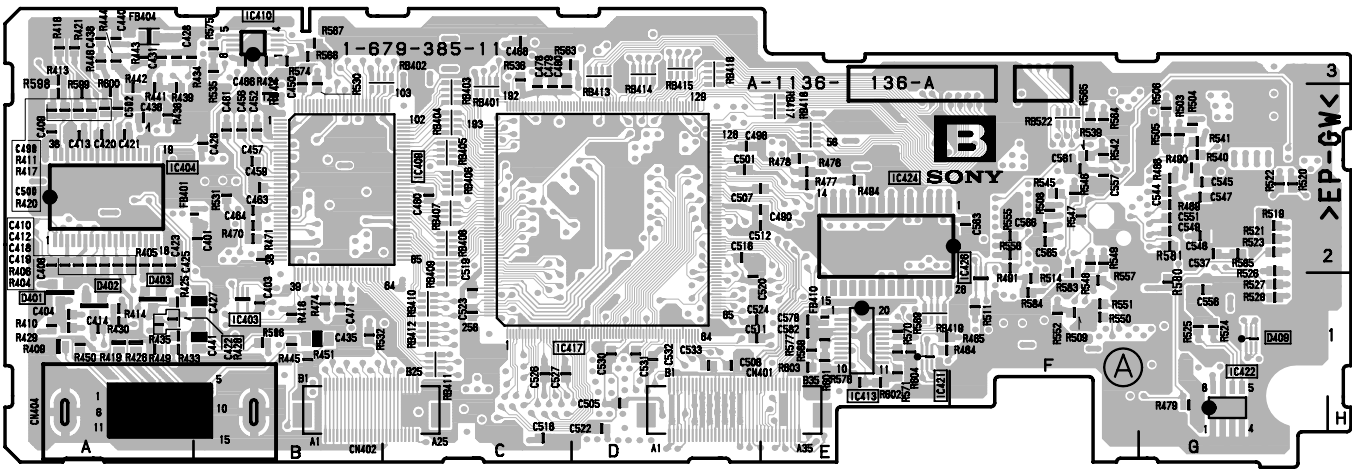
5



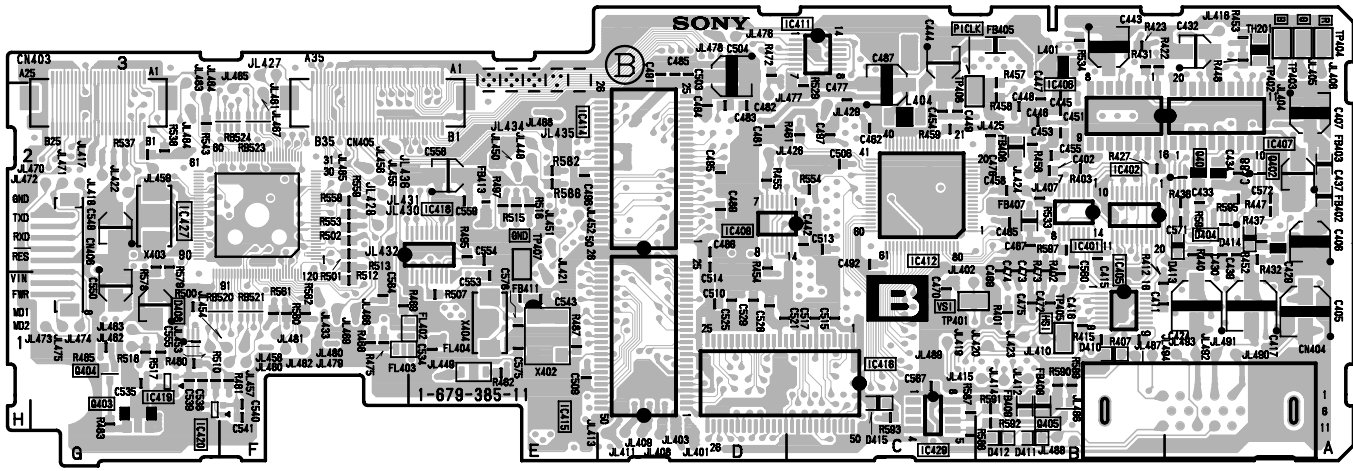
BA  
(COLOR DECODER  
R, G, B DECODER  
D. COMB)

B-S51697&lt;...&gt;-BA.

B Board



B -A SIDE-  
SUFFIX: -11



B -B SIDE-  
SUFFIX: -11

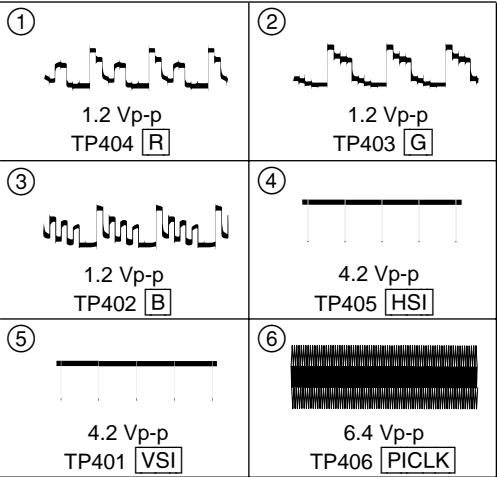
B Board

1-675-793-14

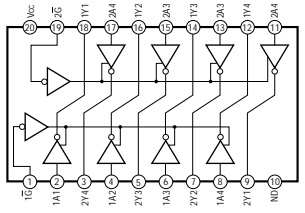
|       |      |       |      |
|-------|------|-------|------|
| IC401 | *B-2 | D401  | A-1  |
| IC402 | *B-2 | D402  | A-1  |
| IC403 | B-1  | D403  | A-1  |
| IC404 | A-2  | D404  | *A-2 |
| IC405 | *B-2 | D408  | *G-1 |
| IC406 | *B-2 | D409  | G-1  |
| IC407 | *A-2 | D410  | *B-1 |
| IC408 | *D-2 | D411  | *B-1 |
| IC409 | C-2  | D412  | *B-1 |
| IC411 | *C-3 | D413  | *A-2 |
| IC412 | *C-2 | D414  | *A-2 |
| IC413 | E-1  | D415  | *C-1 |
| IC414 | *E-2 |       |      |
| IC415 | *E-1 | TP401 | *C-1 |
| IC416 | *C-1 | TP402 | *A-2 |
| IC417 | D-1  | TP403 | *A-2 |
| IC418 | *E-2 | TP404 | *A-3 |
| IC419 | *G-1 | TP405 | *B-1 |
| IC420 | *G-1 | TP406 | *C-2 |
| IC421 | E-1  | TP407 | *E-2 |
| IC424 | E-2  |       |      |
| IC426 | F-2  | X402  | *E-1 |
| IC427 | *G-2 | X403  | *G-2 |
| IC429 | *C-1 | X404  | *E-1 |

|      |      |                |
|------|------|----------------|
| Q401 | *A-2 | *:B Side mount |
| Q402 | *A-2 |                |
| Q403 | *G-1 |                |
| Q404 | *G-1 |                |
| Q405 | *B-1 |                |

B Board Waveforms

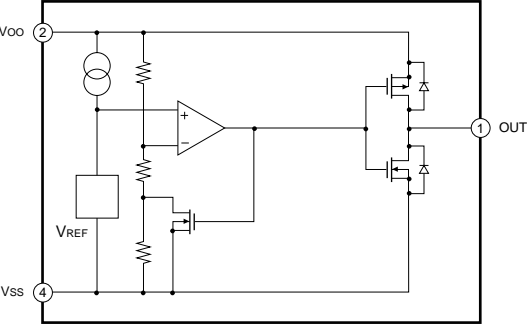


74VHC240MTCX (IC402)

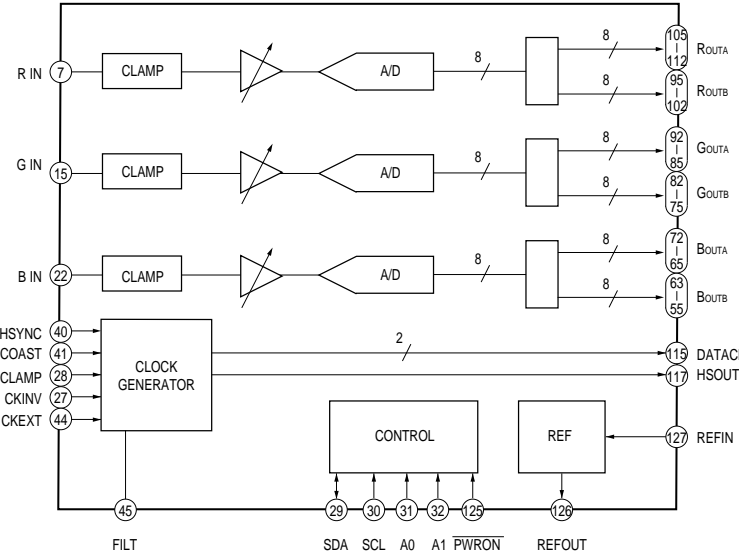


S-80842ANNP (IC419)

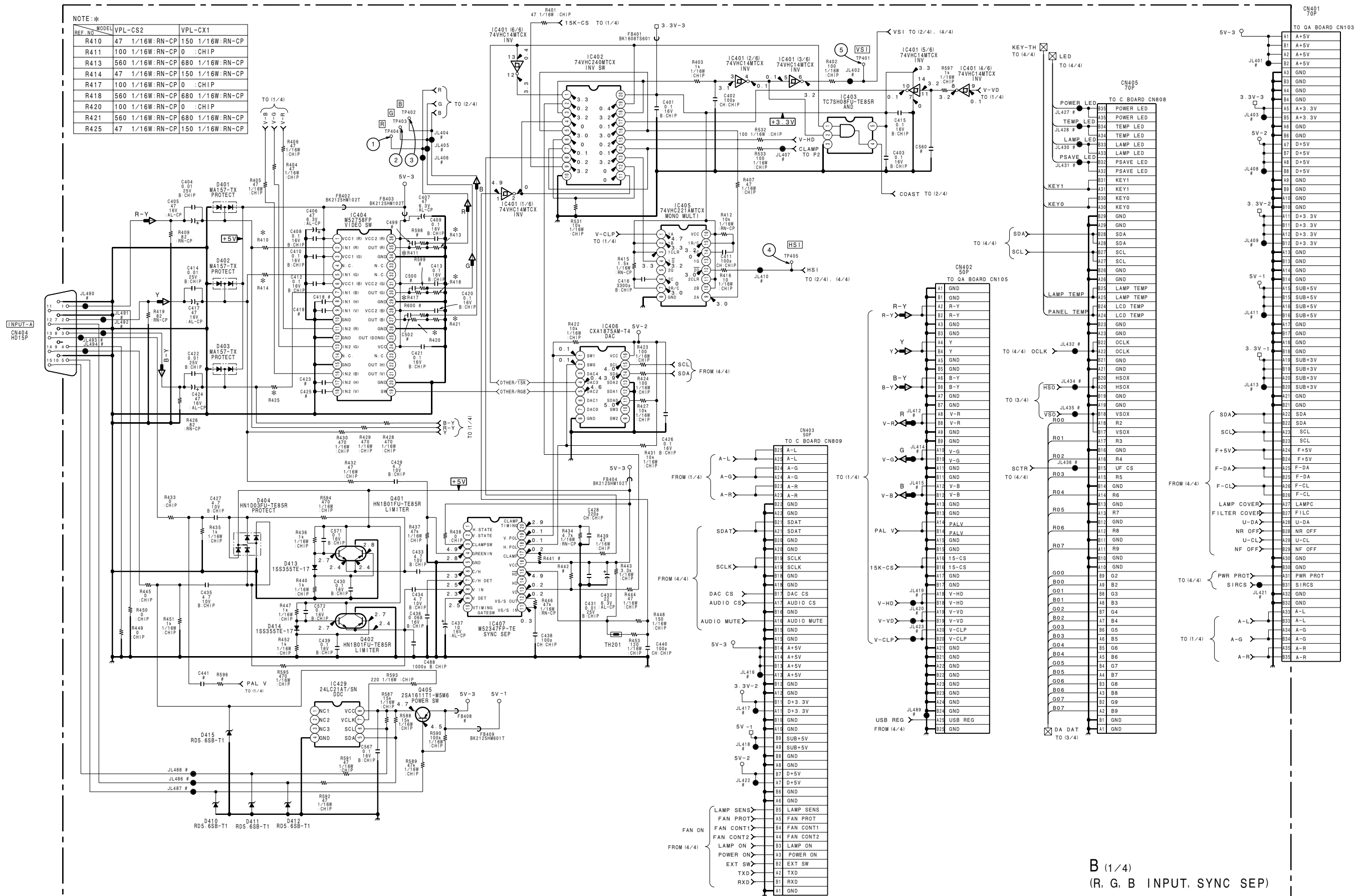
S-80828ANNP (IC420)



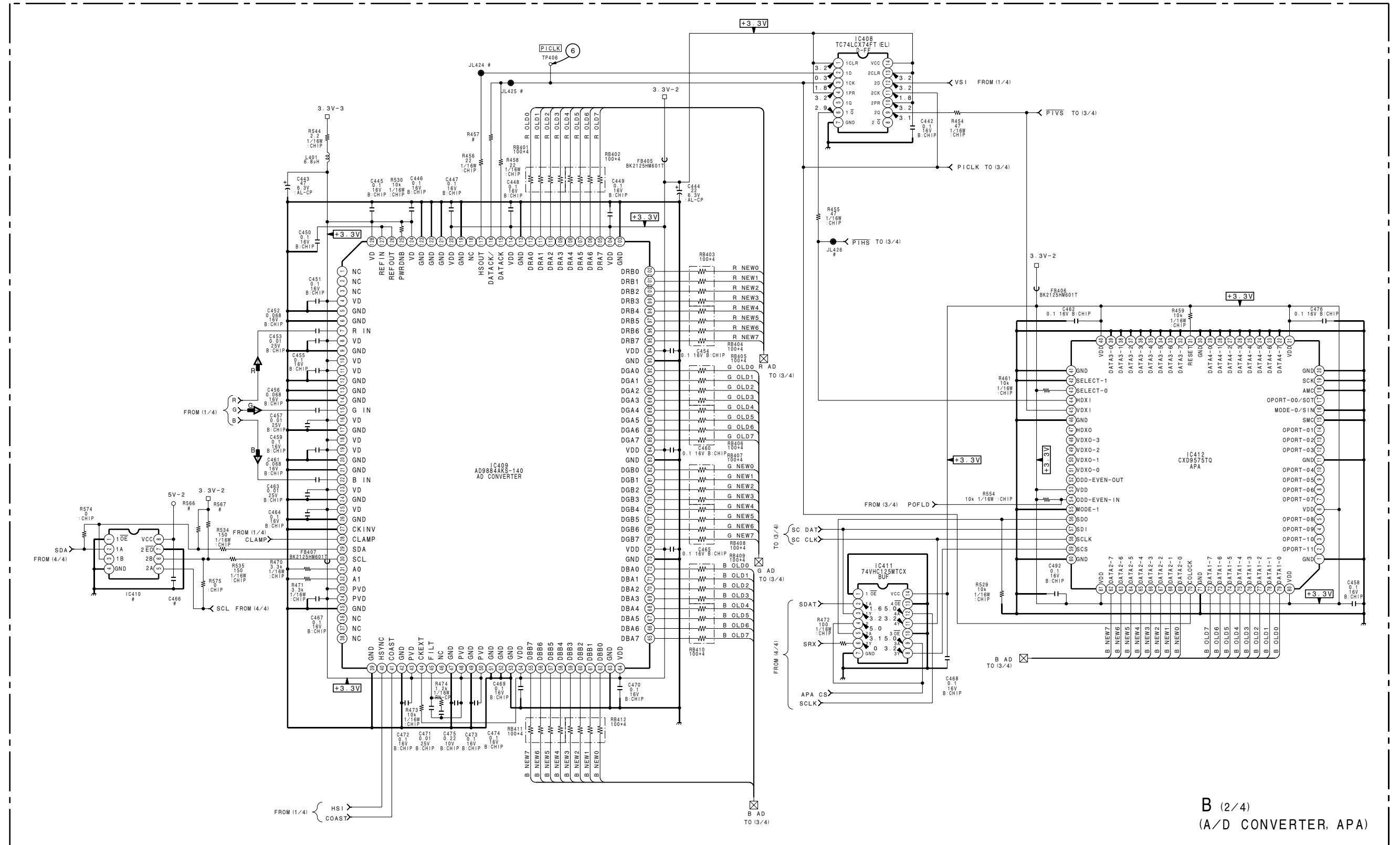
AD9884



- Refer to page 8-9 for Printed Wiring Board
- Refer to page 8-9 for Waveforms
- Refer to page 8-9 for IC Block Diagrams



- Refer to page 8-9 for Printed Wiring Board
- Refer to page 8-9 for Waveforms
- Refer to page 8-9 for IC Block Diagrams



- Refer to page 8-9 for Printed Wiring Board
- Refer to page 8-9 for Waveforms
- Refer to page 8-9 for IC Block Diagrams

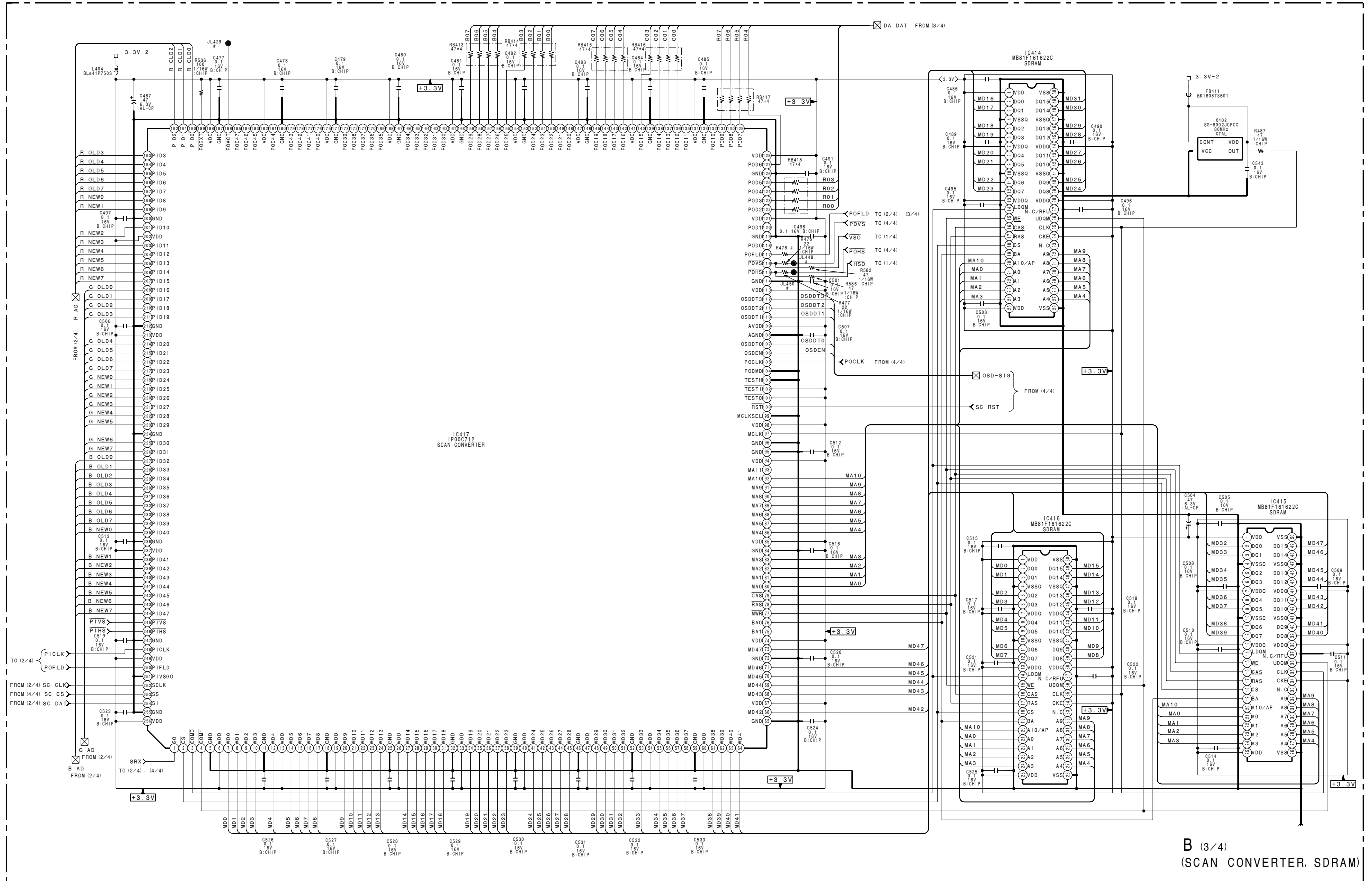
1

2

3

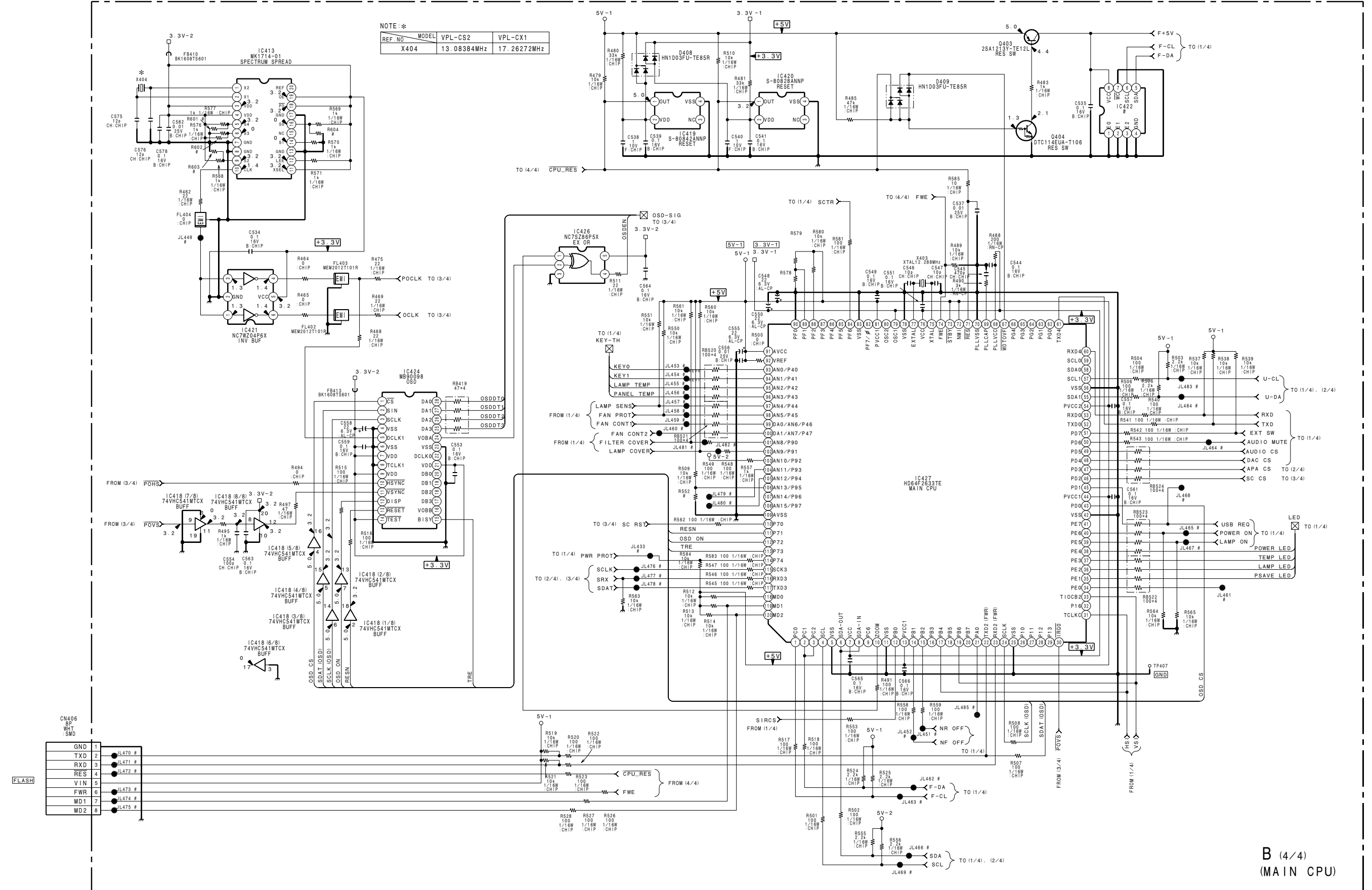
4

5

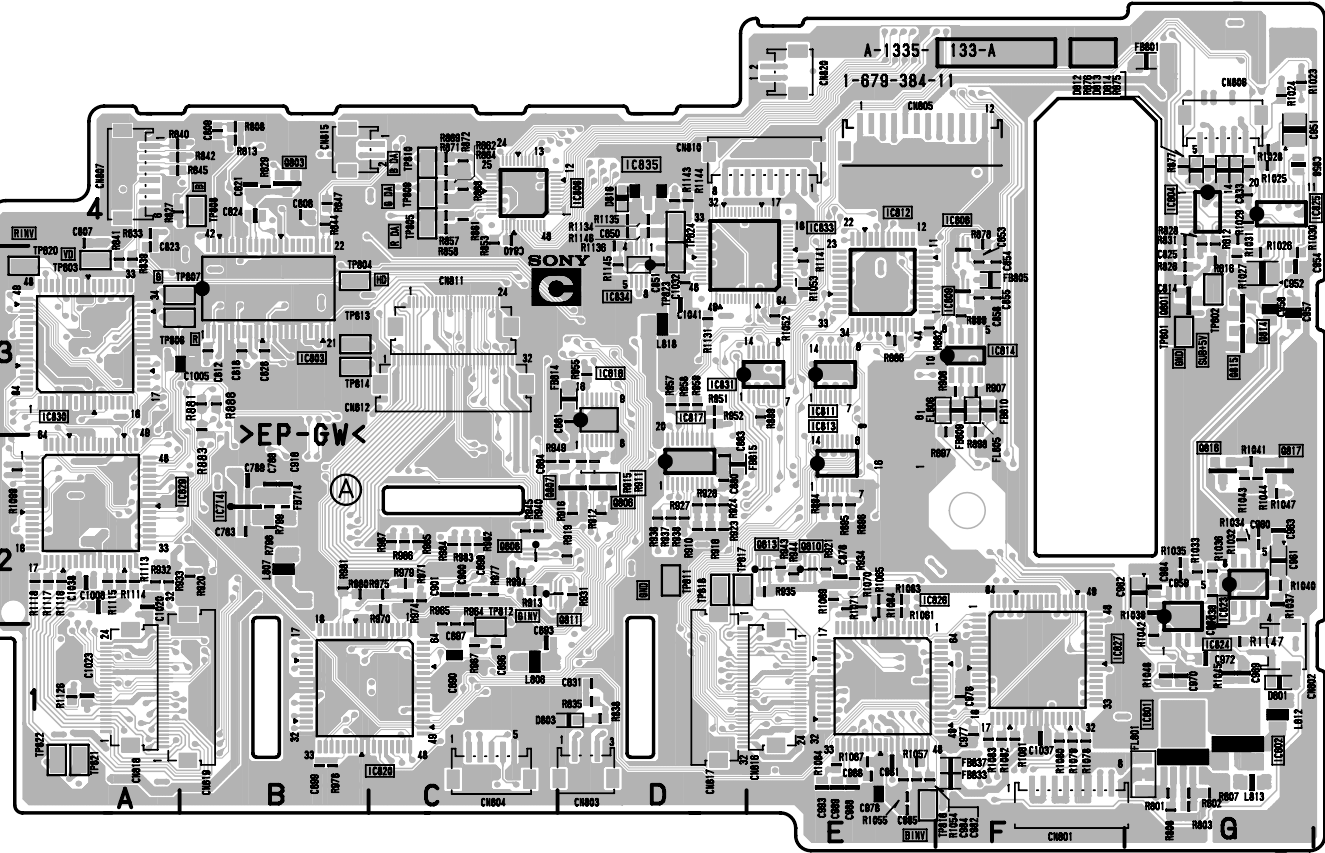


B (3/4)  
(SCAN CONVERTER, SDRAM)

- Refer to page 8-9 for Printed Wiring Board
- Refer to page 8-9 for Waveforms
- Refer to page 8-9 for IC Block Diagrams



C Board



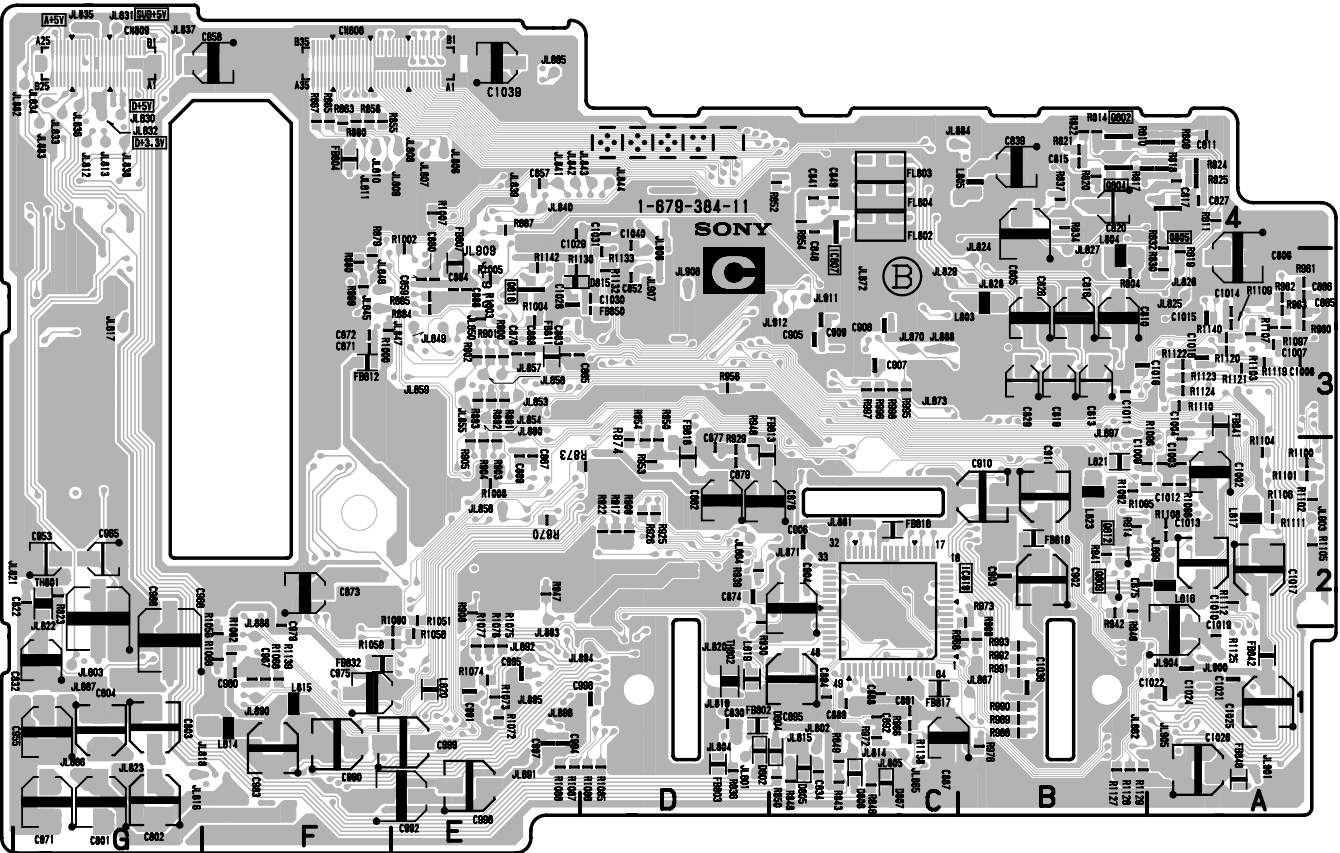
C -A SIDE-  
SUFFIX: -11

C Board

1-679-384-11

|       |      |      |      |       |      |
|-------|------|------|------|-------|------|
| IC714 | B-2  | Q801 | G-3  | D813  | F-4  |
| IC801 | G-1  | Q802 | *B-4 | D814  | F-4  |
| IC802 | G-2  | Q803 | B-4  | D815  | *D-3 |
| IC803 | B-3  | Q804 | *B-4 | D816  | D-4  |
| IC804 | G-4  | Q805 | *A-4 |       |      |
| IC806 | D-4  | Q806 | D-2  | TP801 | G-3  |
| IC807 | *C-3 | Q807 | C-2  | TP802 | G-3  |
| IC808 | F-4  | Q808 | C-2  | TP803 | A-3  |
| IC811 | E-3  | Q809 | *B-2 | TP804 | B-3  |
| IC812 | E-4  | Q810 | E-2  | TP805 | C-4  |
| IC813 | E-3  | Q811 | D-2  | TP806 | A-3  |
| IC814 | F-3  | Q812 | *B-2 | TP807 | B-3  |
| IC817 | D-3  | Q813 | E-2  | TP808 | B-4  |
| IC818 | D-3  | Q814 | G-3  | TP809 | C-4  |
| IC819 | *B-2 | Q815 | G-3  | TP810 | C-4  |
| IC820 | C-1  | Q816 | G-2  | TP811 | D-2  |
| IC823 | G-2  | Q817 | G-2  | TP812 | C-2  |
| IC824 | G-2  | Q818 | *E-3 | TP813 | B-3  |
| IC825 | G-4  |      |      | TP814 | B-3  |
| IC826 | E-2  | D801 | G-1  | TP816 | F-1  |
| IC827 | F-1  | D802 | *D-1 | TP817 | D-2  |
| IC829 | A-2  | D803 | C-1  | TP818 | D-2  |
| IC830 | A-3  | D804 | *C-1 | TP820 | A-3  |
| IC831 | D-3  | D805 | *C-1 | TP821 | A-1  |
| IC833 | E-4  | D806 | *C-1 | TP822 | A-1  |
| IC834 | D-3  | D807 | *C-1 | TP823 | D-3  |
| IC835 | D-4  | D812 | F-4  | TP824 | D-4  |

\*:B Side mount

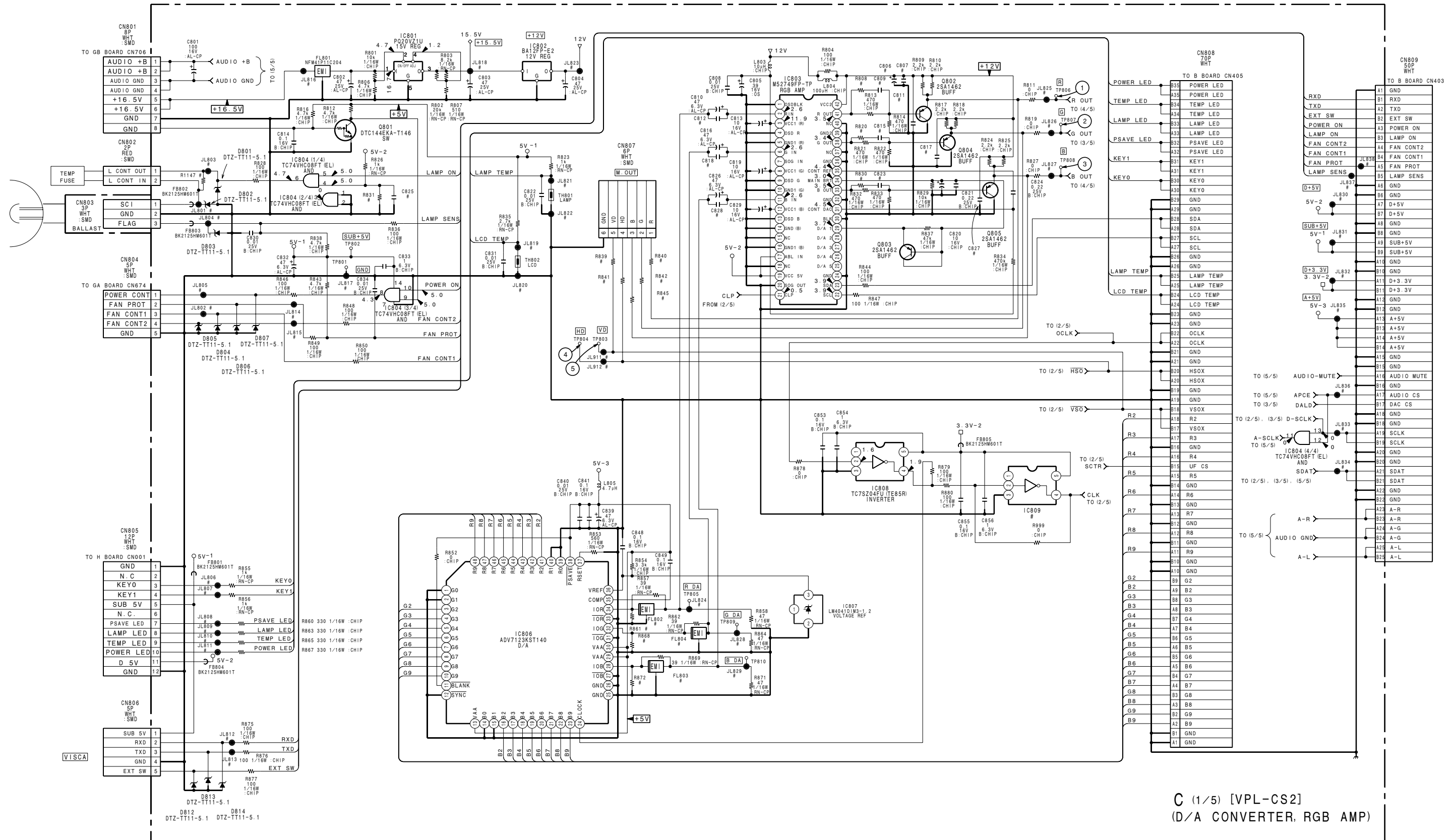


C -B SIDE-  
SUFFIX: -11

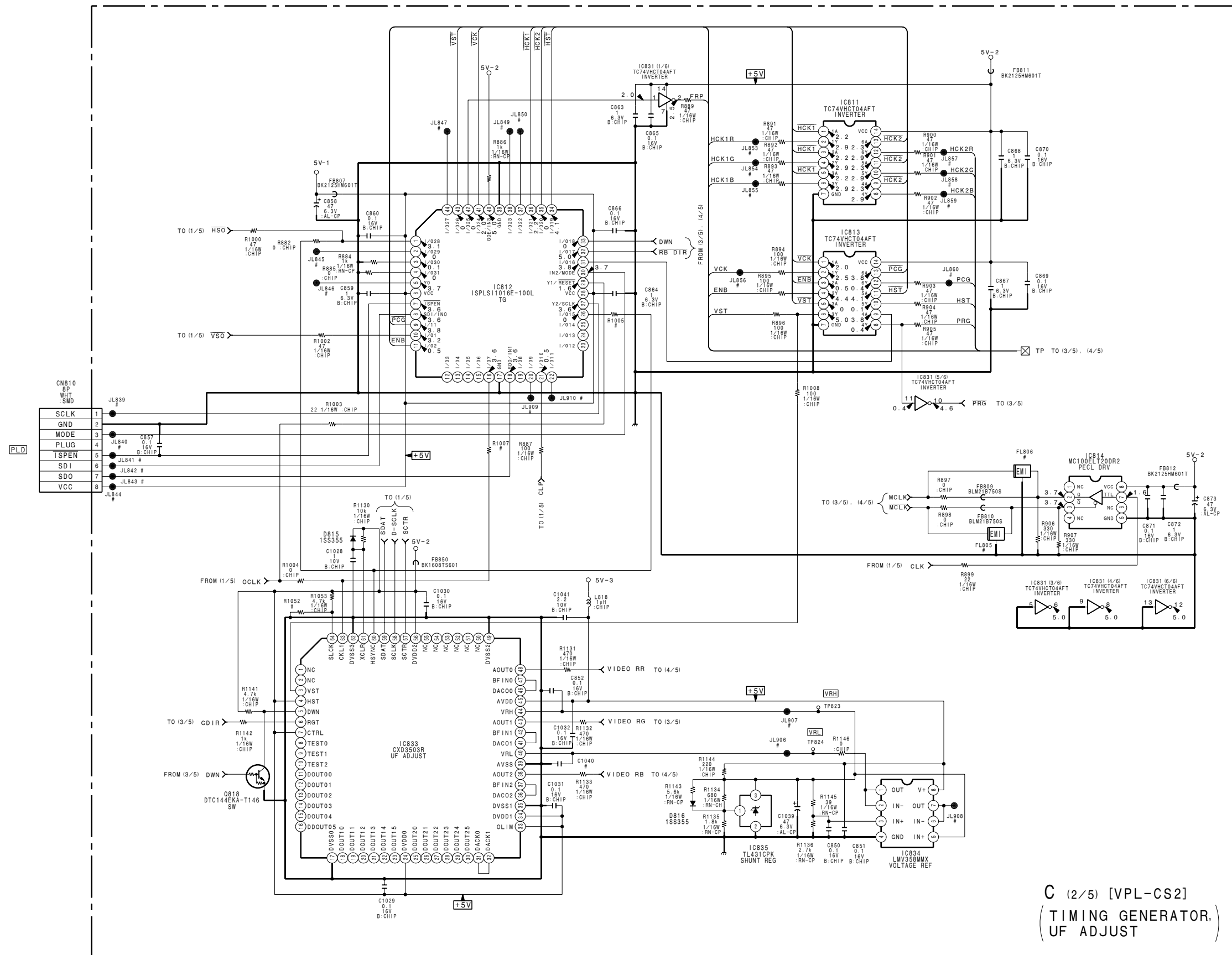


For VPL-CS2

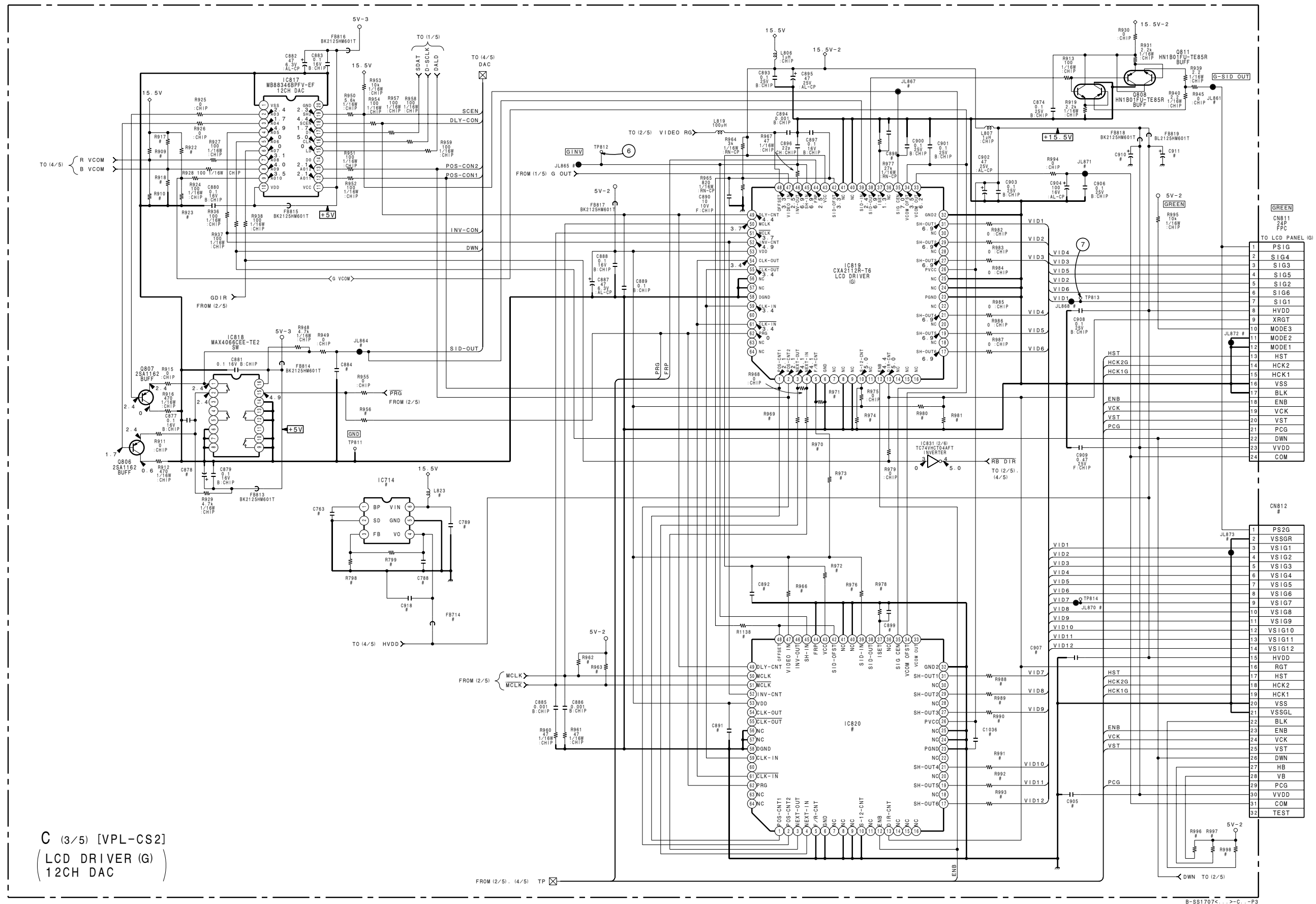
- Refer to page 8-14 for Printed Wiring Board
- Refer to page 8-20 for Waveforms
- Refer to page 8-20 for IC Block Diagrams



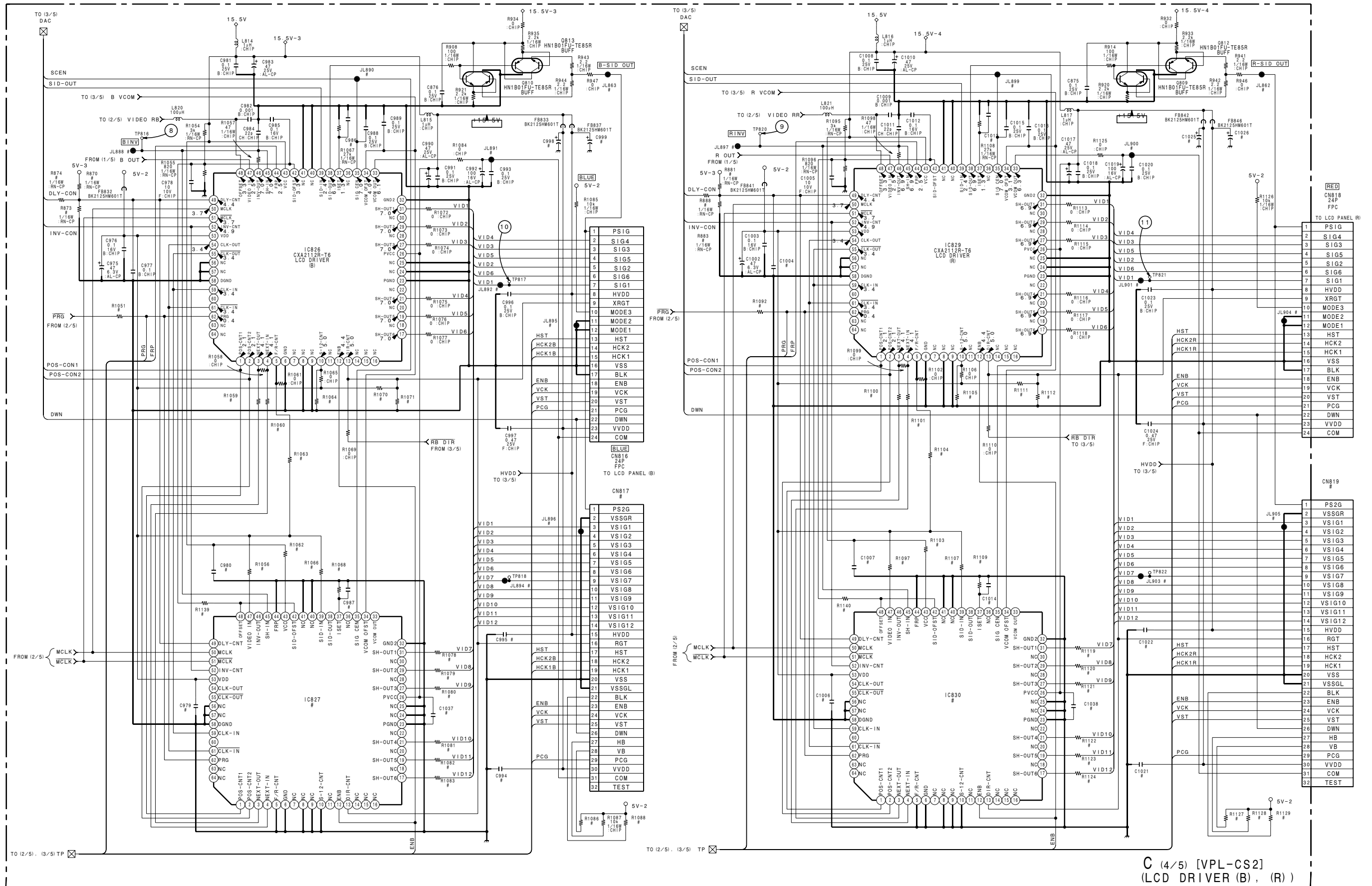
- Refer to page 8-14 for Printed Wiring Board
- Refer to page 8-20 for Waveforms
- Refer to page 8-20 for IC Block Diagrams



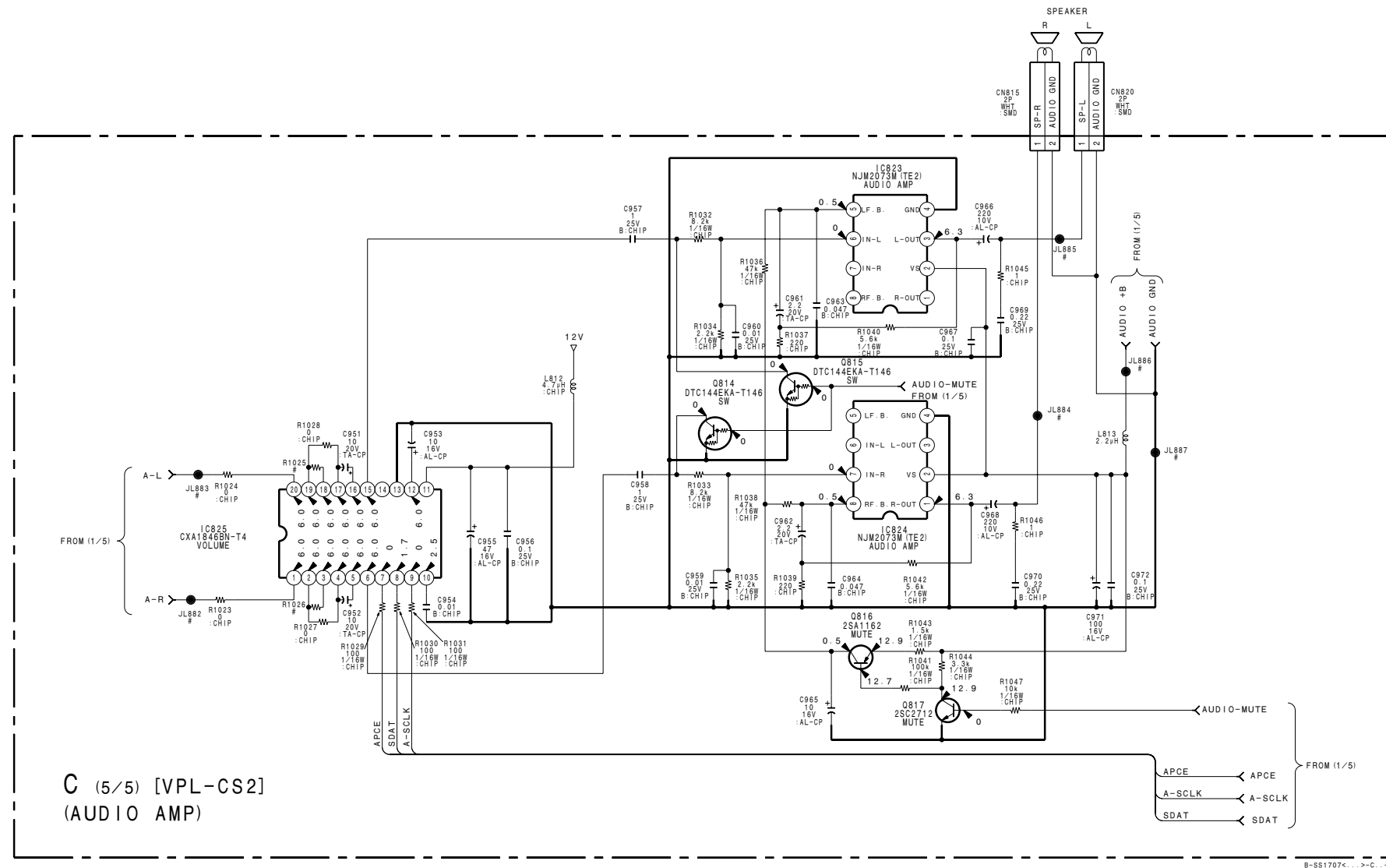
- Refer to page 8-14 for Printed Wiring Board
- Refer to page 8-20 for Waveforms
- Refer to page 8-20 for IC Block Diagrams



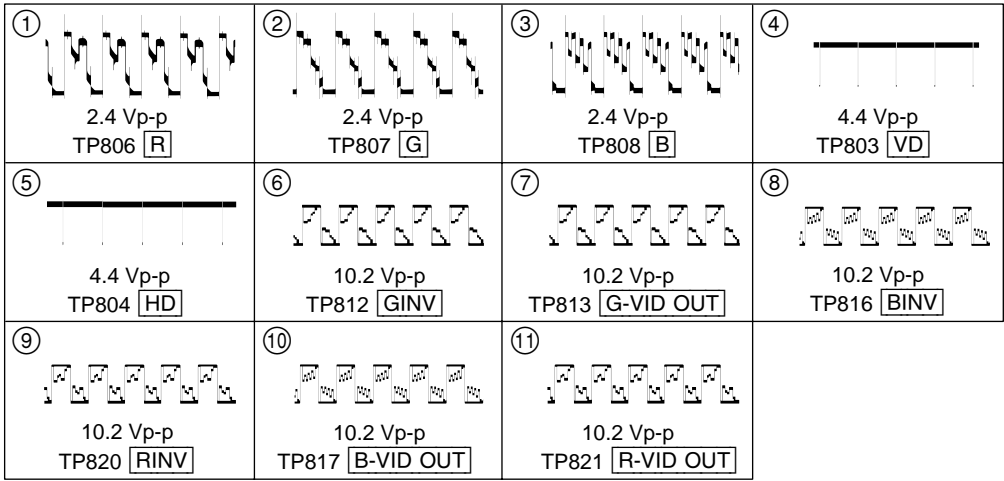
- Refer to page 8-14 for Printed Wiring Board
- Refer to page 8-20 for Waveforms
- Refer to page 8-20 for IC Block Diagrams



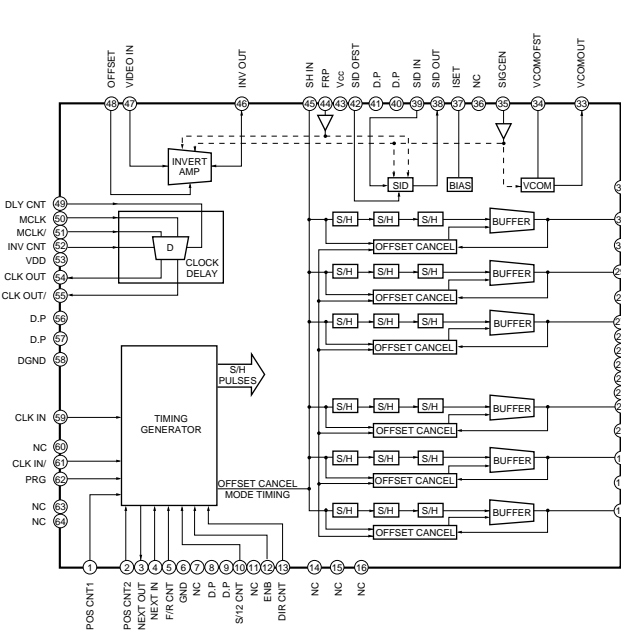
- Refer to page 8-14 for Printed Wiring Board
- Refer to page 8-20 for Waveforms
- Refer to page 8-20 for IC Block Diagrams



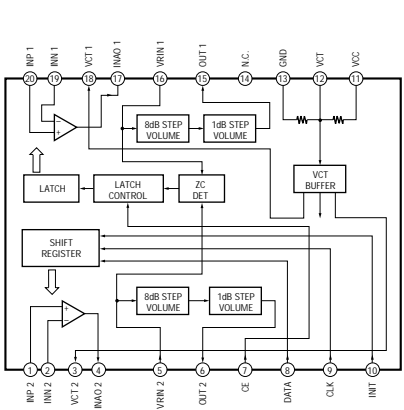
C Board Waveforms



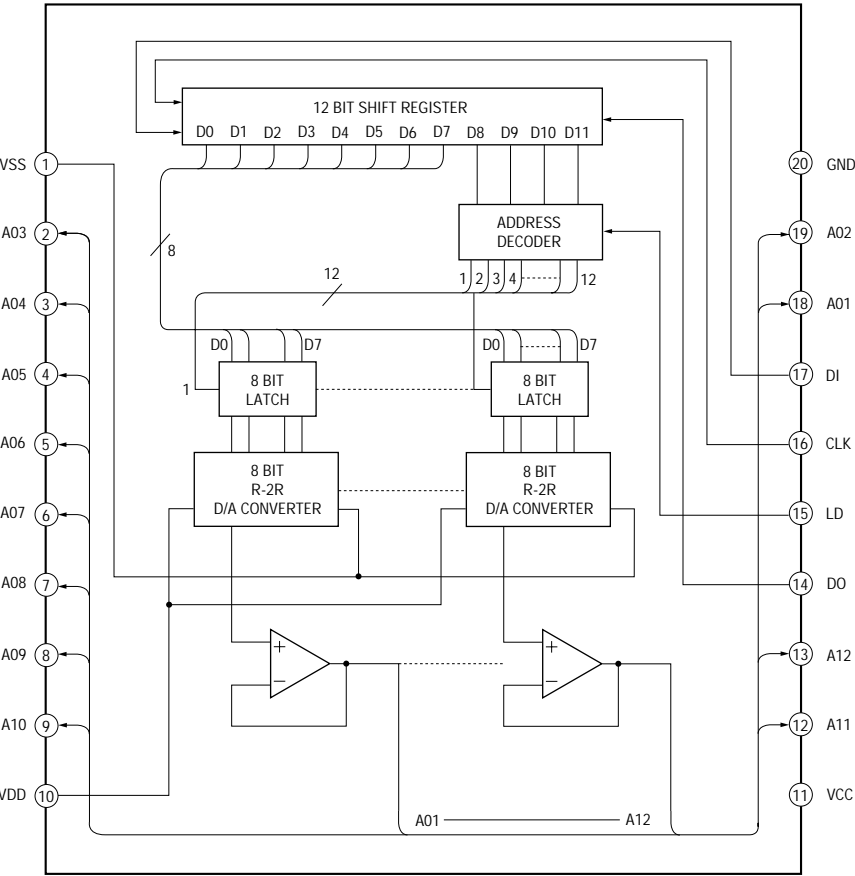
CXA2112R-T6 (IC819, 826, 829 : VPL-CS2)  
(IC819, 820, 826, 827, 829, 830 : VPL-CX1)



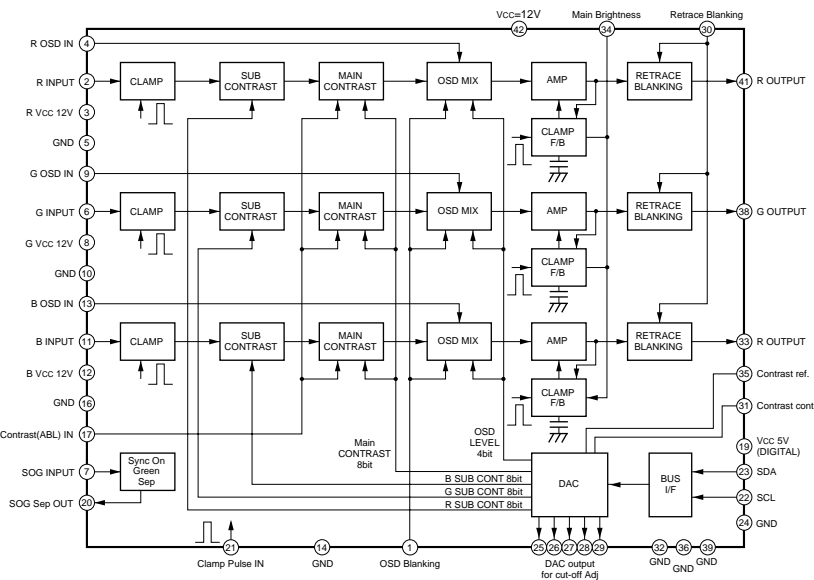
CXA1846BN (IC825)



MB88346BPFV-EF (IC817)

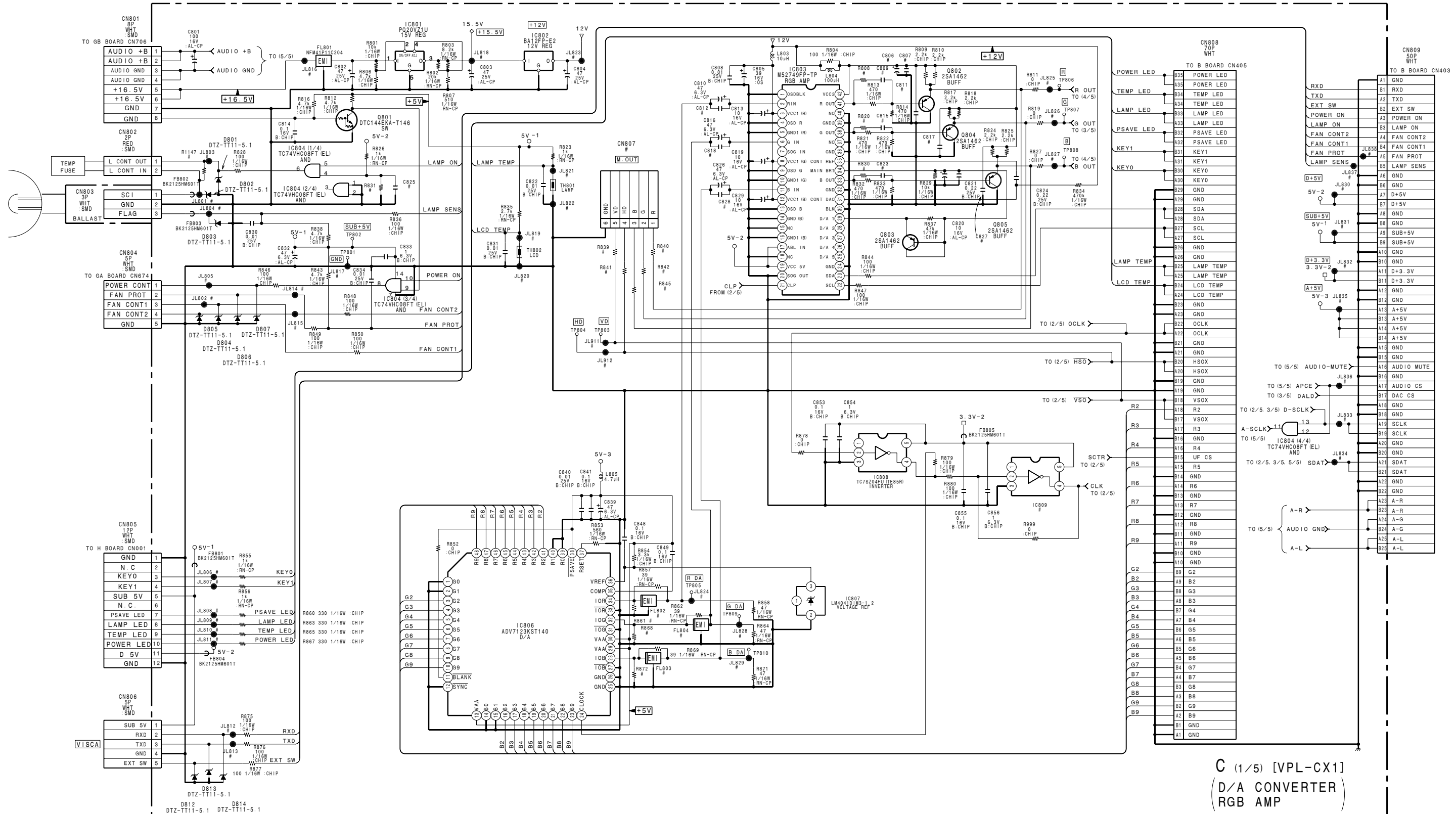


M52749FP-TP (IC803)



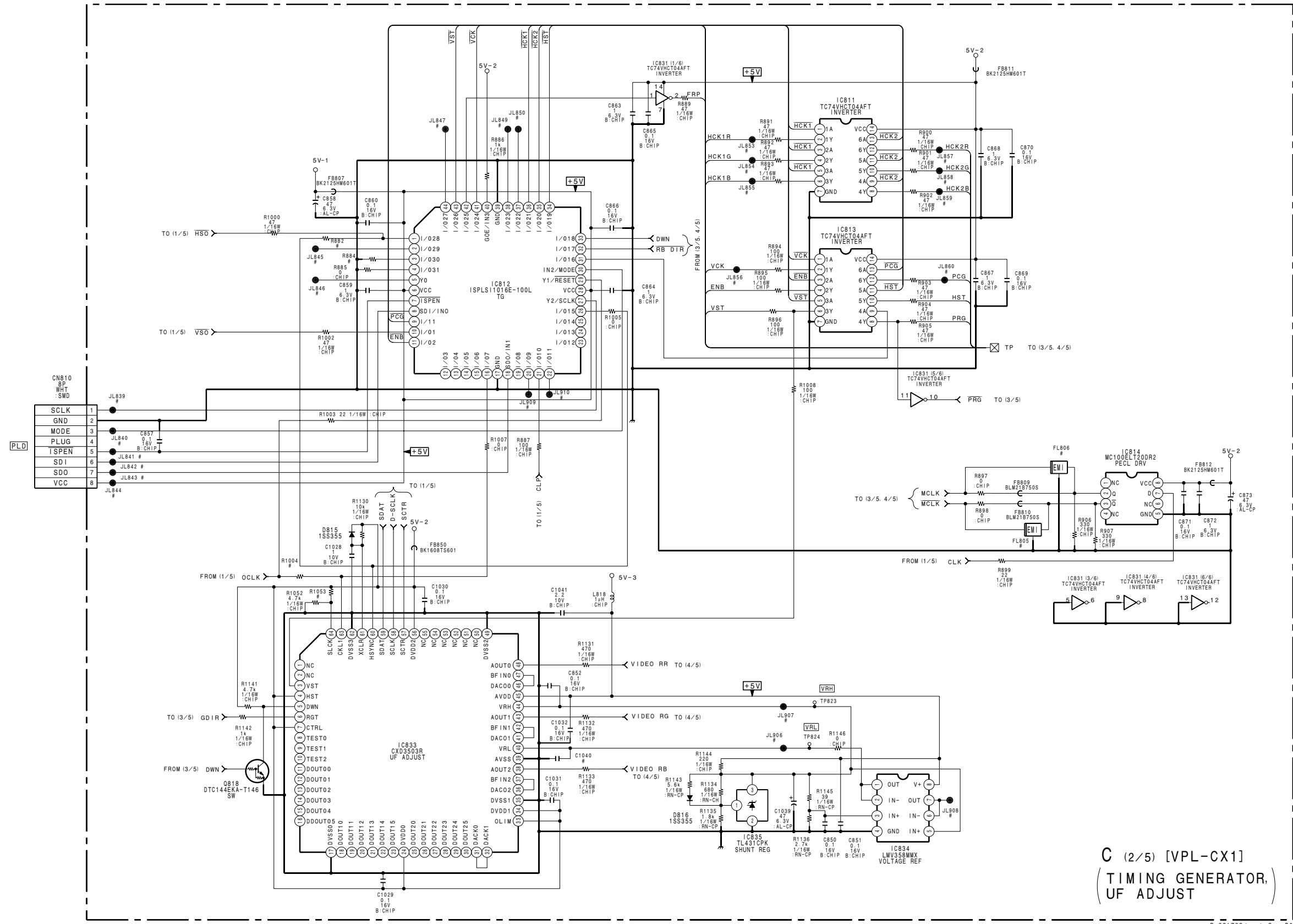
For VPL-CX1

- Refer to page 8-14 for Printed Wiring Board
- Refer to page 8-20 for IC Block Diagrams



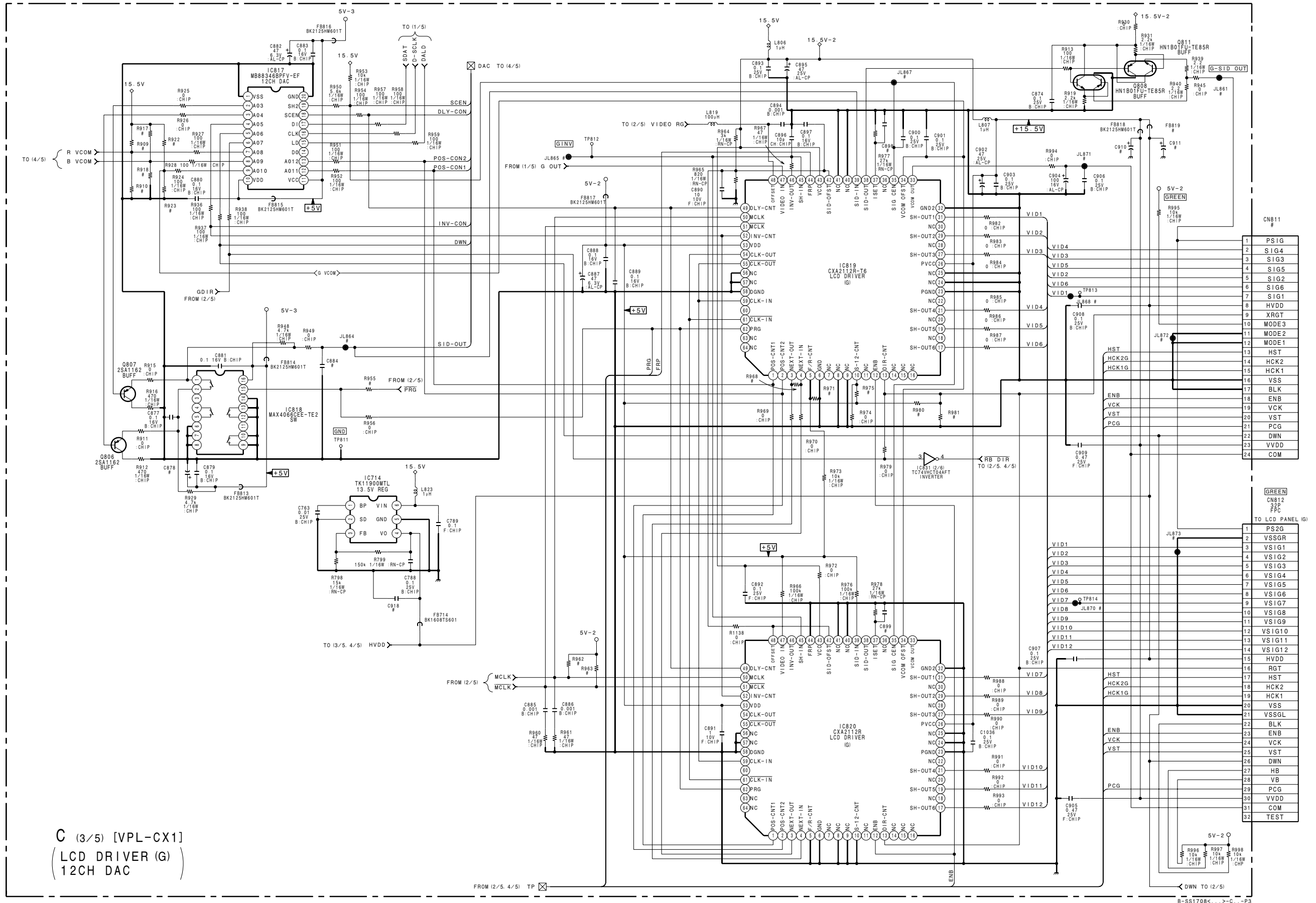
C (1/5) [VPL-CX1]  
(D/A CONVERTER)  
RGB AMP

- Refer to page 8-14 for Printed Wiring Board
- Refer to page 8-20 for IC Block Diagrams

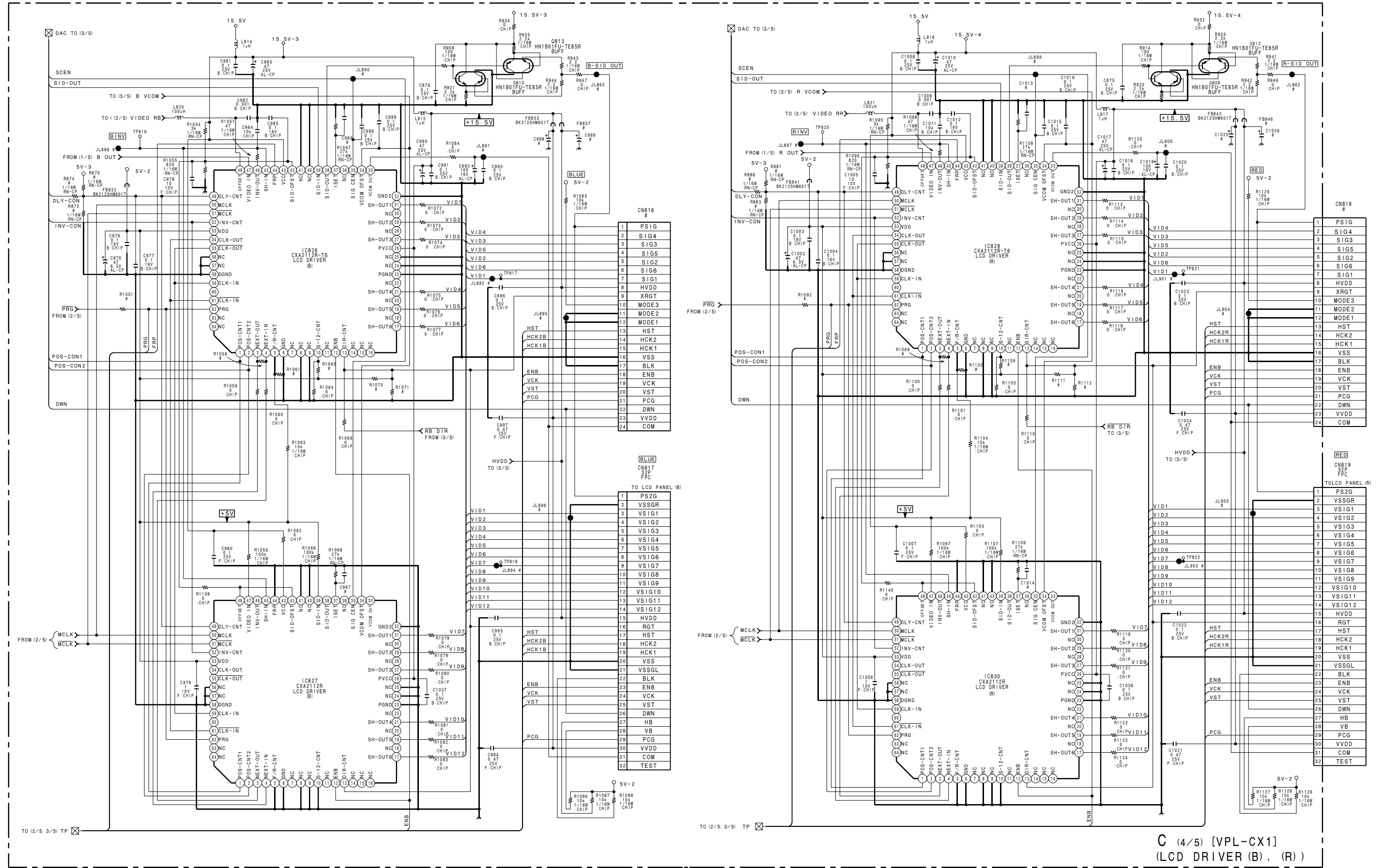




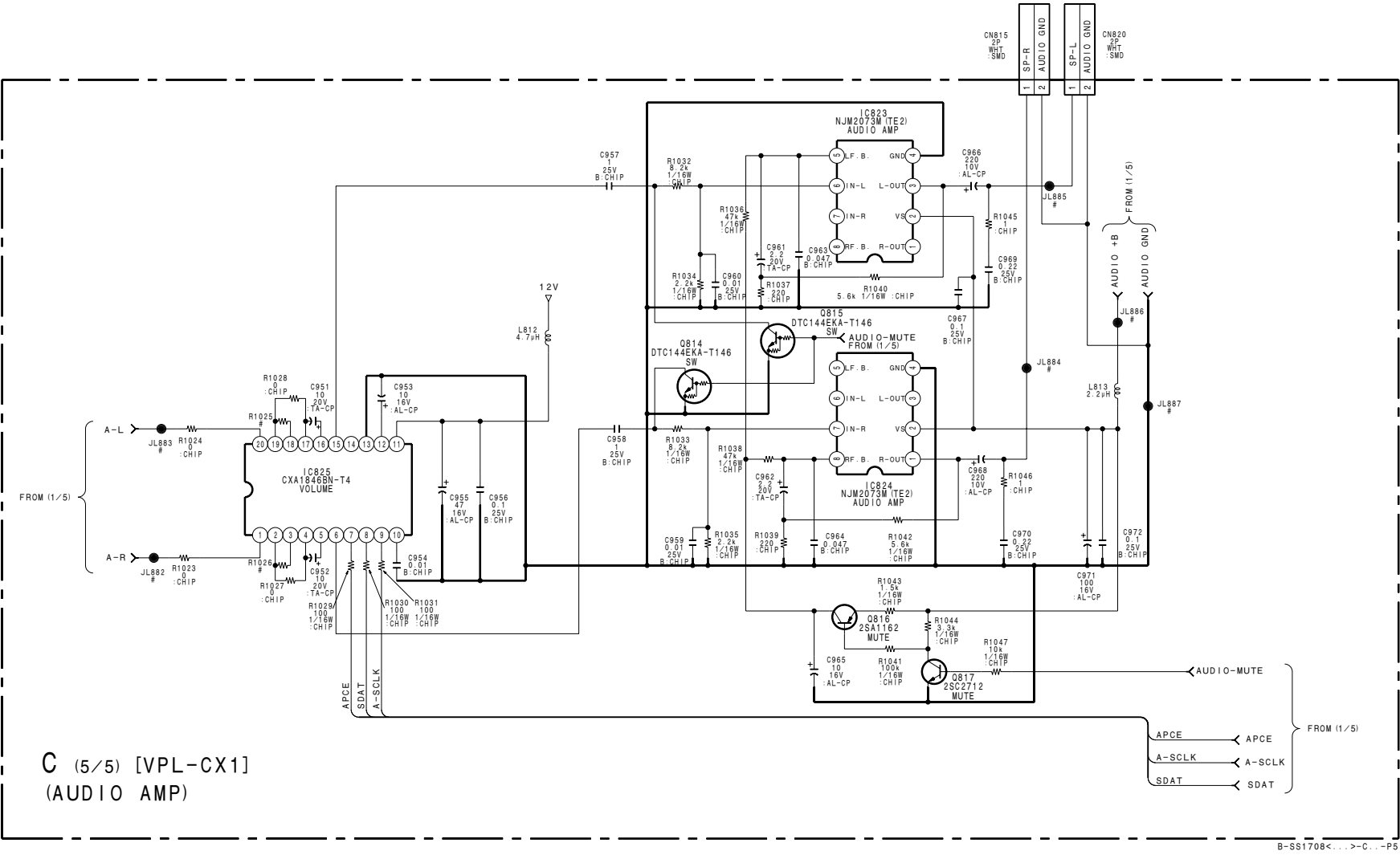
- Refer to page 8-14 for Printed Wiring Board
- Refer to page 8-20 for IC Block Diagrams



- Refer to page 8-14 for Printed Wiring Board
- Refer to page 8-20 for IC Block Diagrams

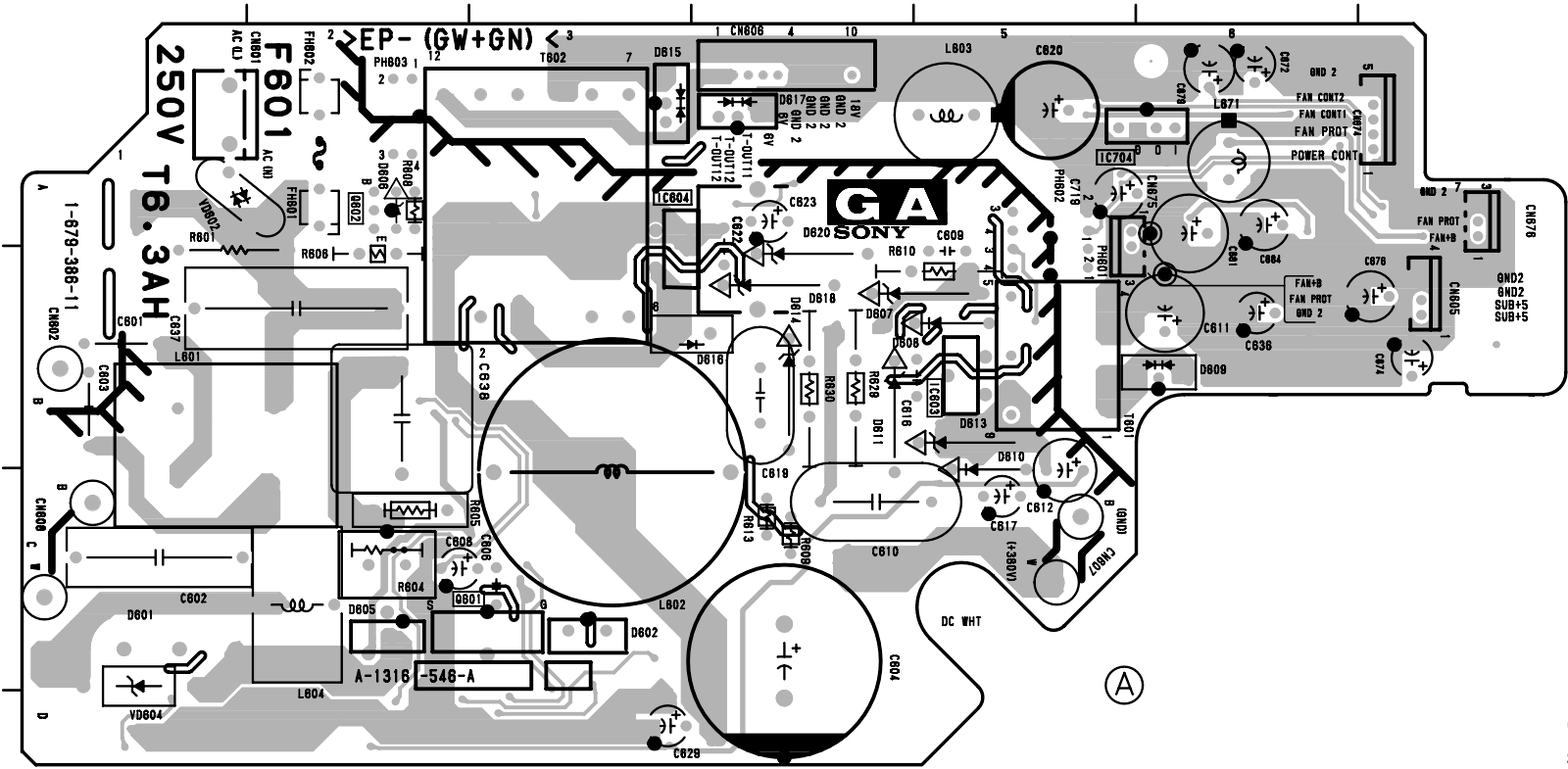


- Refer to page 8-14 for Printed Wiring Board
- Refer to page 8-20 for IC Block Diagrams

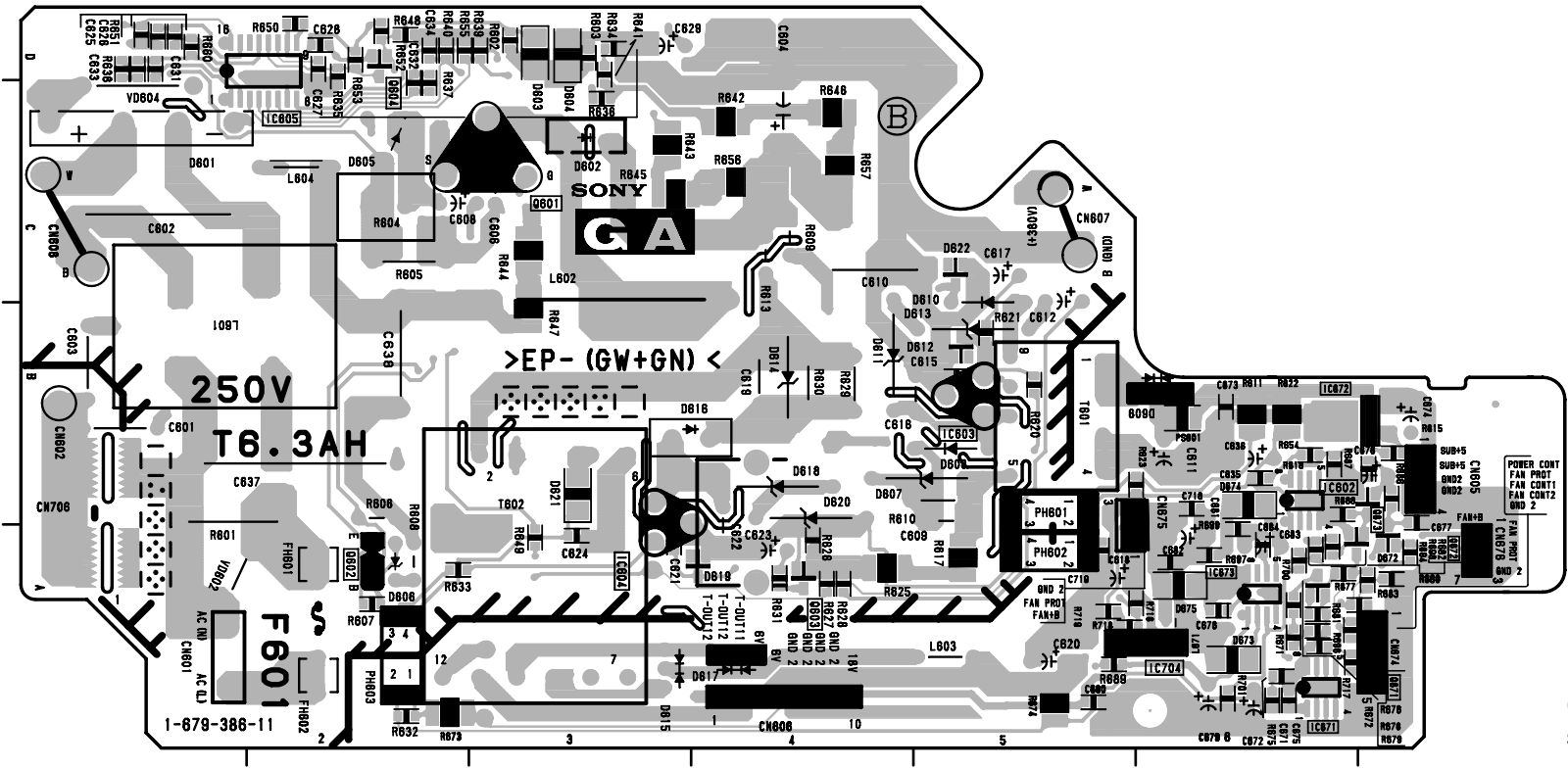


## H

GA Board



GA -A SIDE-  
SUFFIX: -11



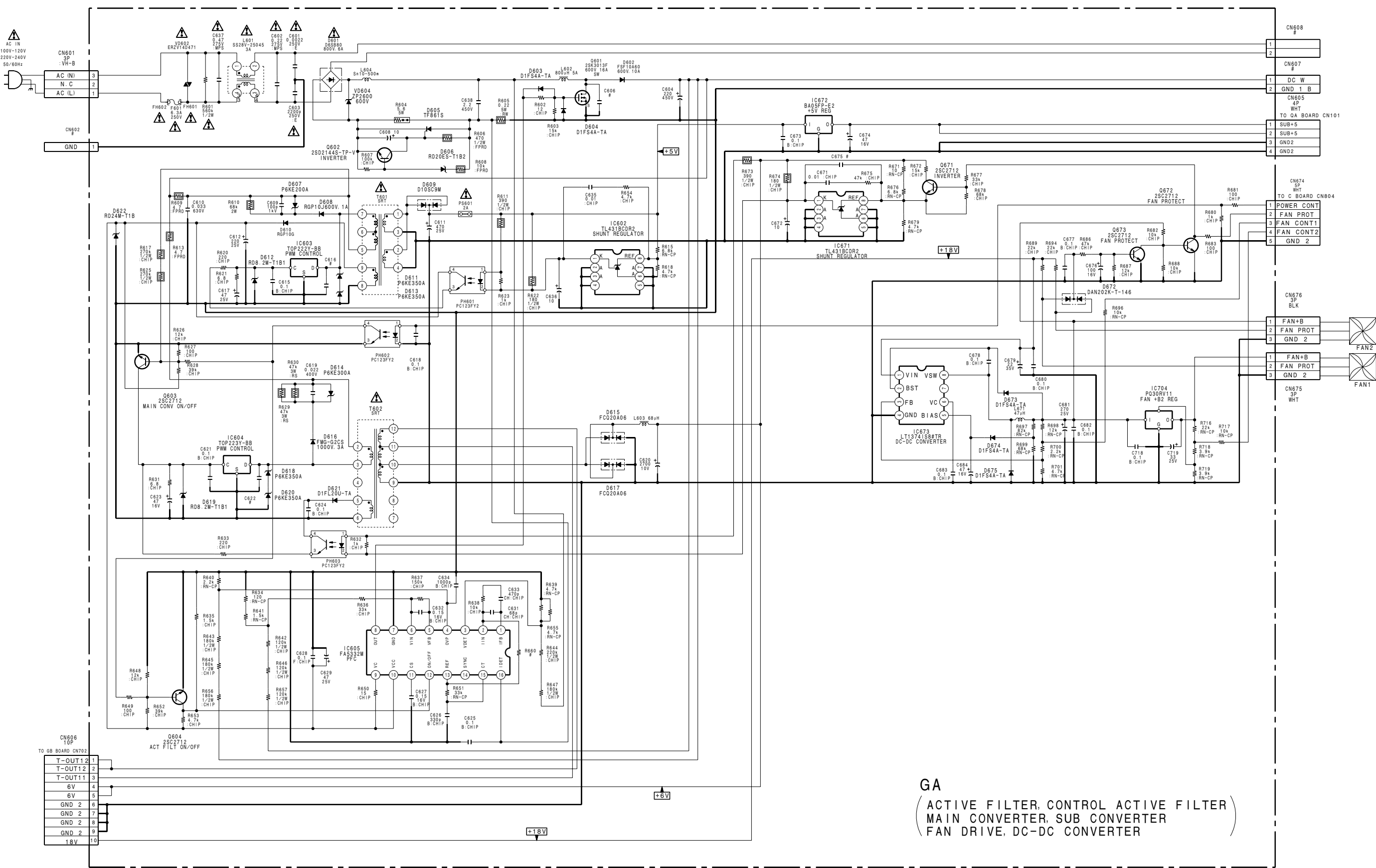
GA -B SIDE-  
SUFFIX: -11

GA Board  
1-679-397

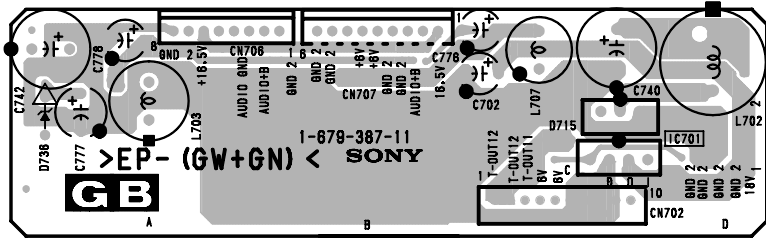
|       |      |
|-------|------|
| IC602 | *B-6 |
| IC603 | B-5  |
| IC604 | A-3  |
| IC605 | *C-2 |
| IC671 | *A-6 |
| IC672 | *B-6 |
| IC673 | *A-6 |
| IC704 | A-5  |
| Q601  | C-3  |
| Q602  | A-2  |
| Q604  | *C-2 |
| Q671  | *A-7 |
| Q672  | *A-7 |
| Q673  | *B-7 |
| D601  | C-1  |
| D602  | C-3  |
| D603  | *C-3 |
| D604  | *C-3 |
| D605  | C-2  |
| D606  | A-2  |
| D607  | B-4  |
| D608  | B-5  |
| D609  | B-6  |
| D610  | B-5  |
| D611  | B-4  |
| D612  | *B-5 |
| D613  | B-5  |
| D614  | B-4  |
| D615  | A-3  |
| D616  | B-4  |
| D617  | A-4  |
| D618  | B-4  |
| D619  | *A-4 |
| D620  | A-4  |
| D621  | *B-3 |
| D622  | *C-5 |
| D672  | *A-7 |
| D673  | *A-6 |
| D674  | *B-6 |
| D675  | *A-6 |
| VD602 | A-1  |
| VD604 | D-1  |
| PH603 | *A-2 |

\*:B Side mount

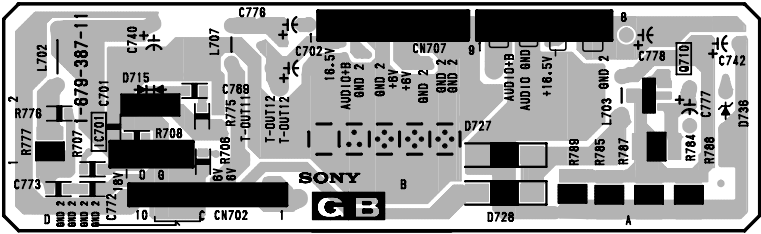
• Refer to page 8-27 for Printed Wiring Board



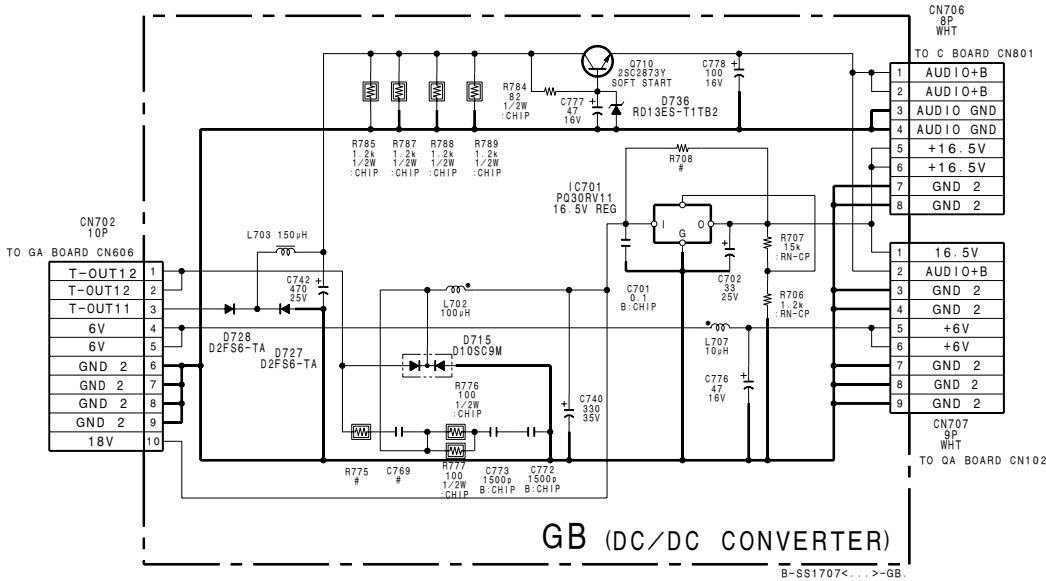
GB Board



GB -A SIDE-  
SUFFIX: -11



GB -B SIDE-  
SUFFIX: -11



GB (DC/DC CONVERTER)





## SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer :

Check the metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA. Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

